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North American Fertilizer Primer

Potash positioned to perform

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■ North American fertilizer: a growth story

North American fertilizer producers are well positioned to benefit from a world that demands higher crop yields in order to feed a growing population with a finite arable land base. Rising incomes, increasing urbanization and associated demand for higher-quality food in the BRIC economies (Brazil, Russia, India, China) all bode well for fertilizer demand.

■ Potash our preferred nutrient

Potash is our preferred nutrient in the crop nutrition universe. With limited supply and strong producer discipline, pricing prospects for potash look strong for the foreseeable future. North American producers of phosphate and nitrogen-based fertilizers face long-term challenges in the form of rising international supply and high natural gas feedstock costs, respectively.

■ Ethanol growth positive for corn and fertilizer

We expect growth in ethanol capacity to continue to drive increased demand for corn, one of the most fertilizer-intensive crops. Historically, rising corn prices have coincided with strong performance from fertilizer stocks.

■ POT and AGU Buy 2; initiating coverage of MOS with Reduce 2

POT is our top fertilizer pick given its exposure to potash. We also rate AGU Buy 2 based on its advantaged feedstock position. We initiate coverage of CF (Neutral 2) and MOS (Reduce 2) with this report. MOS is more than fully valued, in our view.

This report has been prepared by UBS Securities Canada Inc

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Executive summary

Macro trends point to continuing growth in fertilizer demand

A shrinking arable land base, increased urbanization, improving diets in a number of the BRIC economies (Brazil, Russia, India and China) and a growing global population all point towards increased fertilizer demand. North American fertilizer producers are well positioned to benefit from these trends.

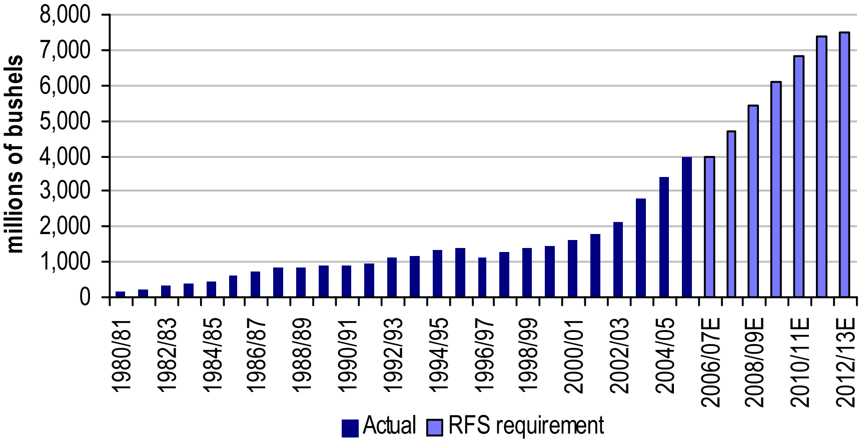
Potash is the most attractive of the three major crop nutrients in our view

Potash is the most attractive of the three major crop nutrients in our view. Potash boasts a consolidated producer base with the top ten producers controlling over 85% of global capacity. Furthermore, potash growth rates over the past five years have been the strongest in the crop nutrition universe – a trend we expect to continue. North American producers of phosphate and nitrogen fertilizer face challenges in the form of rising international supply and high US Gulf Coast gas costs respectively.

We expect growth in ethanol capacity to continue to drive increased demand for corn

We expect growth in ethanol capacity to continue to drive increased demand for corn, one of the most fertilizer-intensive crops. Any way you choose to parse the data, US ethanol production is likely heading higher and is highly likely to be the single largest driver of corn demand growth over coming years.

Chart 1: US ethanol production and RFS requirements, 1980-2012

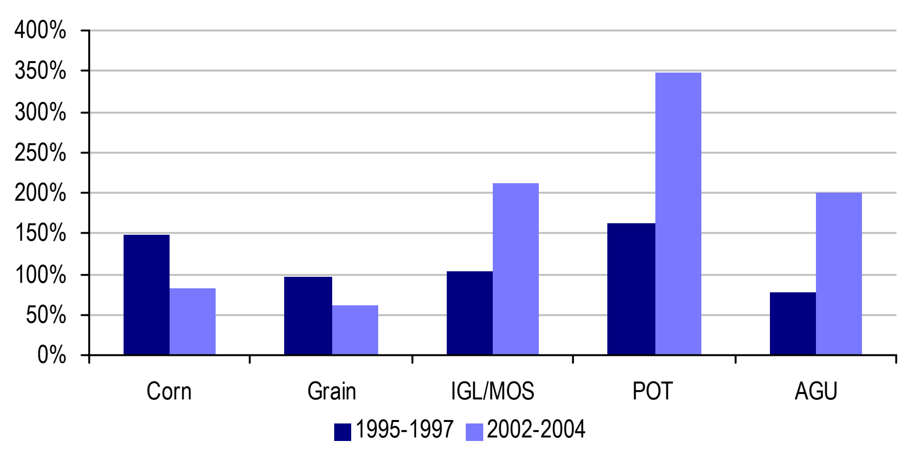


Source: Renewable Fuels Association, Energy Information Administration

We find the case for long-term strength in corn pricing quite compelling

The USDA forecasts that the coming year will see US corn production at its second highest level on record, yet calls for that level of production to fall short of total demand by about 800 million bushels. We find the case for long-term strength in corn pricing quite compelling. Historically, rising corn prices have coincided with strong performance from fertilizer stocks.

Chart 2: Corn/Grain prices vs. fertilizer stocks



Note: Price moves above are peak to trough for the time periods noted. Further note that IGL is a predecessor company to Mosaic.
Source: Reuters

Fertilizer stocks have shown very strong performance in bullish corn markets

We rate both Potash and Agrium Buy 2

Our top picks amongst the North American fertilizer names are PotashCorp and Agrium – both Buy 2 rated. PotashCorp offers the best strategic fit with our macro view in favour of potash assets. The company offers more leverage to potash than any other company in our global coverage universe via both current production and its significant reserve of unutilized potash capacity. While Agrium offers less leverage to potash, we expect the company's strategically located nitrogen fertilizer assets will continue to provide it with a cost advantage relative to higher cost producers dependent upon US Gulf Coast natural gas feedstocks.

We initiate on CF Industries with a Neutral 2, while Mosaic is a Reduce 2 on valuation concerns

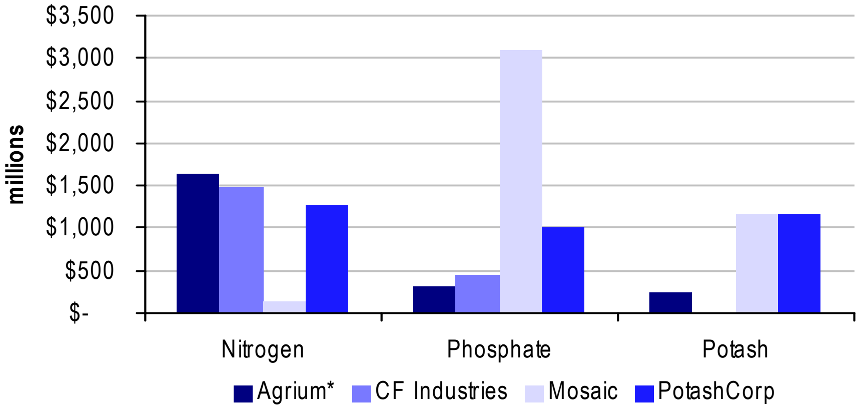
We initiate coverage of CF Industries with a Neutral 2 rating. We believe CF owns the 'best house in a bad neighbourhood' with its Donaldsonville asset—an undesirable position in both the production of ammonia and in real estate. We initiate coverage of Mosaic with a Reduce 2 rating based on valuation concerns. While Mosaic offers exposure to both potash and phosphate, we believe the valuation is more than full and would encourage investors seeking exposure to these markets to consider PotashCorp.

Table 1: Summary of targets and ratings

Company	Ticker	Target	Rating	Comment
Agrium Inc.	AGU.N	$ 29.00	Buy 2	Nitrogen fertilizer producer with advantaged feedstock in Alaska, Alberta and Argentina. Benefits from high US gas prices. Large retail business.
CF Industries Holdings, Inc.	CF.N	$ 18.00	Neutral 2	Nitrogen play with some exposure to phosphate. US Gulf Coast gas costs a key risk, but petroleum coke a strong strategic alternative for the future.
The Mosaic Company	MOS.N	$ 13.00	Reduce 2	Largest phosphate producer globally with significant potash assets. Phosphate business should benefit from recent restructuring. Valuation appears more than full in our view.
Potash Corporation of Saskatchewan Inc.	POT.N	$ 115.00	Buy 2	Largest potash producer globally with meaningful phosphate and nitrogen businesses. Highest quality fertilizer company in North American in our view.

Source: Reuters, UBS estimates

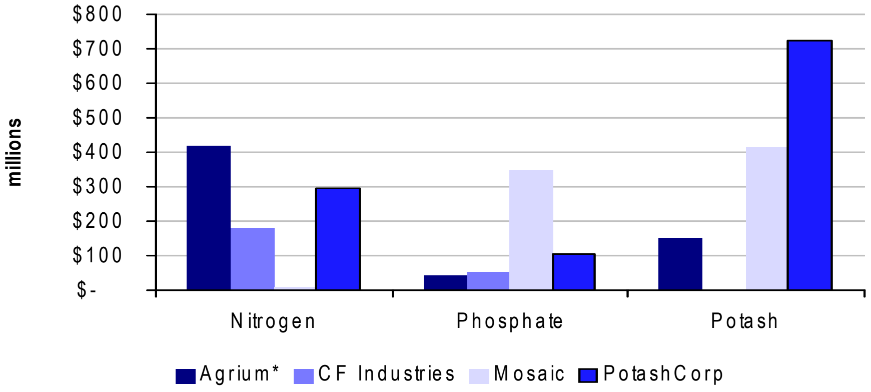
Chart 3: Revenues by segment, 2005



*Wholesale N.A. and S.A. segments only. Source: Company reports, UBS estimates

Mosaic is the largest fertilizer company in North America by wholesale revenues

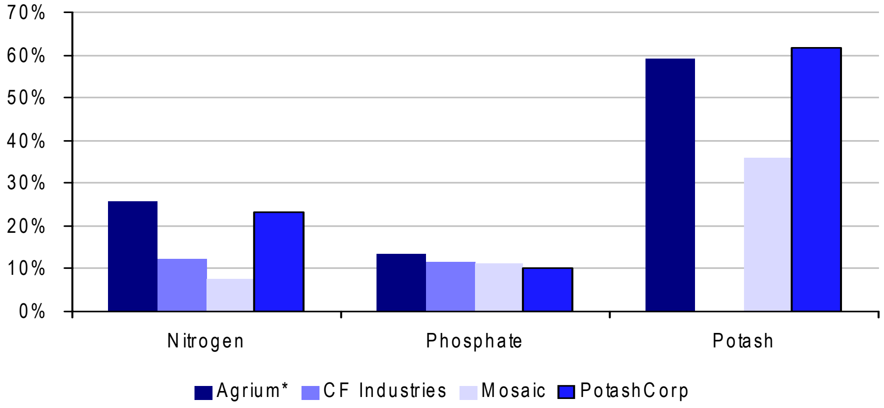
Chart 4: EBITDA by segment, 2005



*Wholesale N.A. and S.A. segments only. Source: Company reports, UBS estimates

PotashCorp's potash business was the single most profitable business in this group in 2005

Chart 5: EBITDA margins, 2005



Source: Company reports, UBS estimates

Potash has consistently been the most profitable of the fertilizer businesses

The fertilizer market

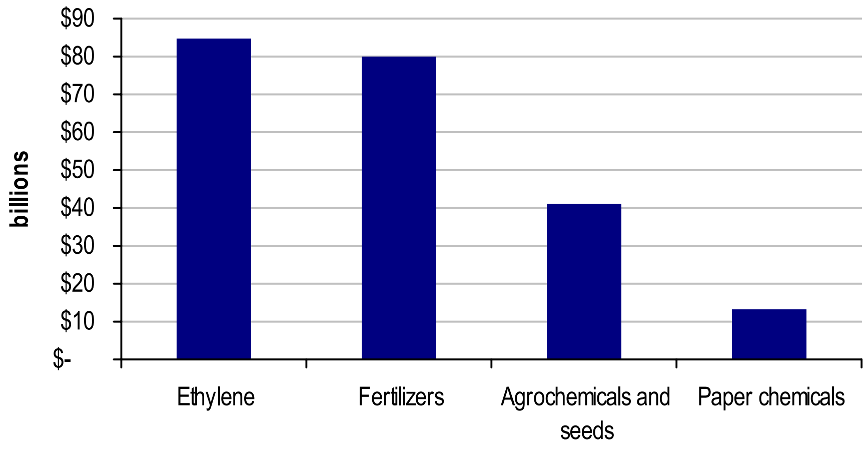
Fertilizer is a substance applied to soil in order to increase a crop's yield. Fertilizer generally boosts the amount of nitrogen (N), phosphorous (P) or potassium (K) available for plant growth. N, P and K are the key nutrients that crops depend on, although fertilizers may also contain other important trace elements such as sulphur, calcium and magnesium. There are two types of fertilizers: organic (manure), and inorganic fertilizers. The former targets multiple nutrients, whereas the latter tends to focus on specific nutrients. Organic fertilizers make up a small portion of the global market.

Fertilizer is a substance applied to soil in order to increase a crop's yield

The inorganic fertilizer industry (henceforth referred to as the *fertilizer industry*) is one of the largest chemicals industries, with 2005 revenues of over $75 billion, and total consumption of 154 million tonnes. Nitrogen fertilizers currently dominate the industry, and have been the fastest-growing segment in the past 30 years, although potassium and phosphate fertilizers are expected to grow at faster rates over coming years.

Nitrogen fertilizers have dominated in the past 30 years, although phosphate and potash are now growing faster

Chart 6: Global industry sales



Source: Company reports, Yara

Global fertilizer consumption in 2005 was 154 million tonnes, having grown from 69 million tonnes in 1970 at a compound annualized growth rate of 3.1% per year. Nitrogen fertilizer demand has posted the highest growth during the period, having increased by an average of 4.1% per year, followed by phosphate and potash. In the last 10 years though, growth has been more modest, with global fertilizer consumption rising 1.3% per year on average. Potash has posted the highest average growth rate over the past decade at 2.5% per year, followed by phosphate with 1.7% per year, and nitrogen consumption growth of only 0.9% per year.

The collapse of the former Soviet Union lowered fertilizer growth rates dramatically over the past decade

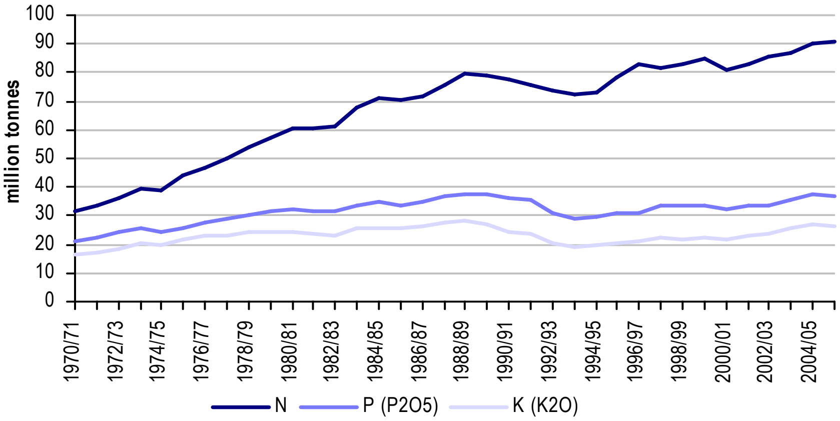
The slowdown in demand in the last 10 years was due partly to the collapse of communism in Eastern Europe and the former Soviet Union (FSU), after which fertilizer consumption in these regions declined precipitously. In these areas, application rates are still only a fraction of their former levels. In 2005, nitrogen fertilizers accounted for 59% of global fertilizer production, phosphate 24% and potash 17%.

According to industry convention, fertilizers are compared by the concentration of their primary nutrients; N is measured just as nitrogen, P is measured as P_2O_5 equivalent and K as K_2O equivalent. Fertilizers may be measured in nutrient tonnes, giving the weight of these equivalents (always less than the actual product weight, due to the presence of other elements).

The use of fertilizers has changed significantly in the past 50 years. In 1960, 63% of fertilizers were used for mixed applications, whereas today that number has declined to 35%. Today, fertilizers are generally targeted toward specific nutrients, and tend to fall into one or sometimes two of the specific categories, N, P and K. Fertilizers are used by farmers to boost:

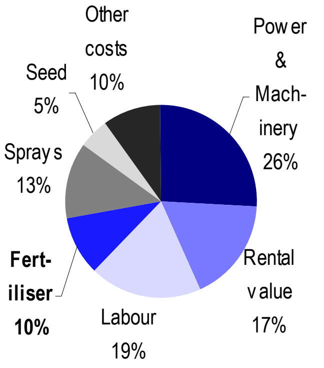
- crop yields;
- the physical quality of the crop;
- disease resistance; and,
- nutrient value.

Chart 8: World fertilizer consumption by nutrient



Source: International Fertilizer Industry Association

Chart 7: Wheat production costs



Note: Winter wheat production costs for a 100-200 ha arable farm
Source: Yara

Fertilizer use can lower unit production costs by as much two-thirds for a farmer

The economic incentive for a farmer to employ fertilizer is significant. A farmer's profitability is materially enhanced by the use of fertilizer, with production cost per unit dropping by as much as two-thirds via the efficient use of fertilizer (Table 2). Fertilizer is a relatively small component in terms of the overall cost of production for crops in the developed world (approximately 10% for wheat as shown in Chart 7), although it can be a more significant cost in the developing world. However, the use of fertilizer only goes so far. Beyond a certain level, further addition of fertilizer does not provide incremental benefit in terms of yield.

Table 2: Economic gains from the use of fertilizer

Treatment	Grain yield (t/ha)	Revenue* (units/ha)	Production cost (units/ha)	Profit	Production cost per ton of grain (unit/t)
No fertilizer	2.1	210	593	-383	**282**
Mineral fertilizer (192kg N/ha)	9.3	930	885**	45	**95**

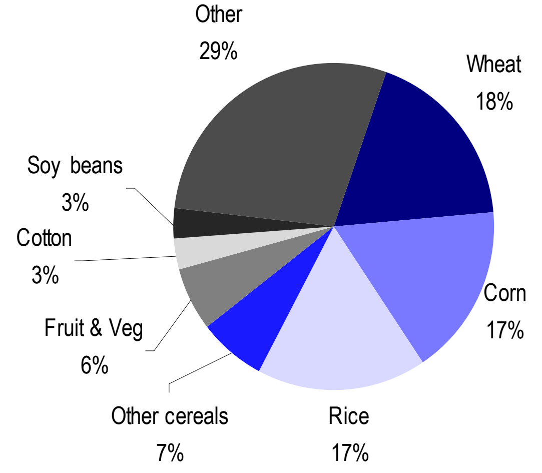
*Assuming grain market price of 100 currency units/tonne; ** Cost increase due to intensive production, including purchase of N fertilizer.

Source: Yara

Corn is the most fertilizer-intensive crop

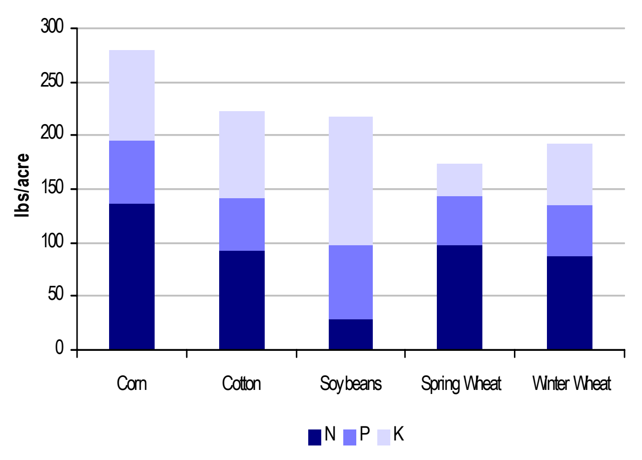
In terms of fertilizer consumption, cereals (wheat, corn, rice, etc) dominate, representing 60% of global fertilizer consumption. The balance is generally made up by fruits and vegetables. Corn is the most fertilizer-intensive crop, consuming approximately 135lb/acre of N, 60lb/acre of P, and 85lb/acre of K in the United States. Wheat and cotton also have a high per-acre requirement for N, although in North America fewer acres are seeded with these crops.

Chart 9: World fertilizer consumption by crop



Source: PotashCorp

Chart 10: US fertilizer application rates by major crop



Source: Agrium

Drivers of fertilizer demand

Population growth is a key driver of fertilizer demand

Fertilizer demand is driven by three interrelated factors. The first is population growth. As the population rises, more food will be consumed. The world population has tripled to over six billion in the past 70 years, and is expected to reach eight billion by 2025. With stocks of the world's grains at historically low levels, the demand for fertilizers is expected to continue growing.

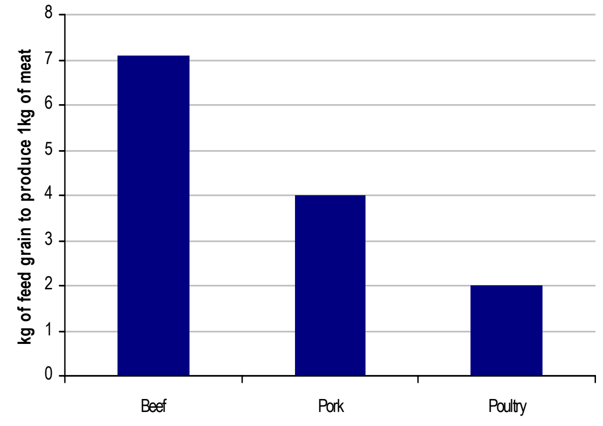
Higher protein consumption also drives fertilizer demand

The second driver is rising income and higher living standards, which in turn lead to an increase in protein intake and meat consumption. According to the Doane group, it takes seven kilograms of feed to produce one kilogram of beef; four kilograms per one kilogram of pork, and two kilograms per one kilogram of poultry (Chart 11). Increased living standards also lead to an increase in demand for improved foods (improved and enhanced physical quality, increased disease resistance and nutrient value), for which fertilizer is an important factor.

Less arable land per person demands higher crop yields

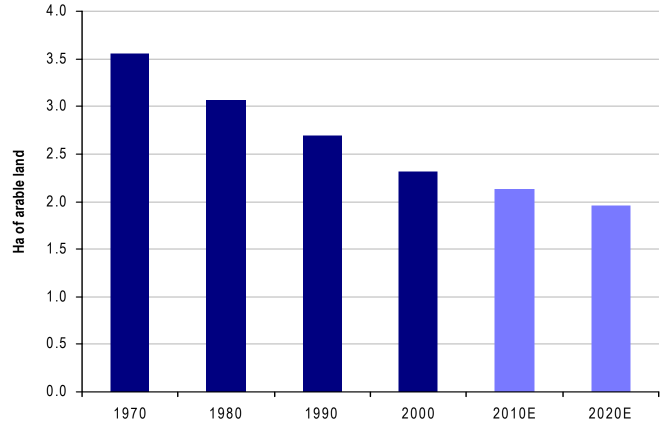
The third driver, related to the rising world population, is the declining amount of arable land available and the resultant pressure on farmers to boost yields. It is estimated that by 2020 there will be just 1.96 hectares per person available for animal and crop production, compared to about 3.75 in 1970, 3.2 in 1980 and 2.5 in 2000 (Chart 12).

Chart 11: Kg. of feed grain to produce one kg. of meat



Source: Doane, PotashCorp

Chart 12: Land availability per person, 1970-2020E



Source: FAO, PPI, PotashCorp

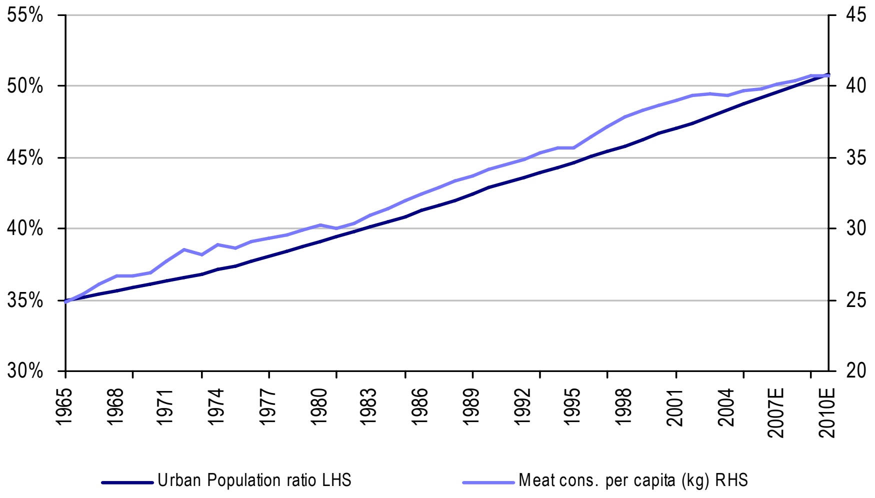
Demand for fertilizers accelerated at 6.4% per annum for the 1961-81 periods, with N demand growing the most rapidly due to favourable crop yield responses, especially from corn, and its need to be applied on a regular basis. Fertilizer demand fell off rapidly in the 1990s because of the break-up of the USSR, which led to the deconstruction of the Soviet-era agricultural base.

It has only been in recent years—with the emergence of China's strong economic growth, coupled with rapid population growth in the whole of Asia—that fertilizer demand has begun to accelerate once again. High urbanization rates in China and India in particular are also contributing to the growth in demand, as meat and protein consumption becomes more important with continuing urbanization. This trend is likely to continue to drive demand for crops in the future.

Urban population growth—a major driver of fertilizer demand

With growing food demand caused by a growing population, as well as the urbanization trend, we believe that fertilizer demand will continue to grow as farmers are required to get maximum productivity from their land. While population growth is seen as a major demand factor, in our view, *urban population growth* is also a major catalyst for food consumption.

Chart 13: Meat consumption versus urban population, 1965-2010E

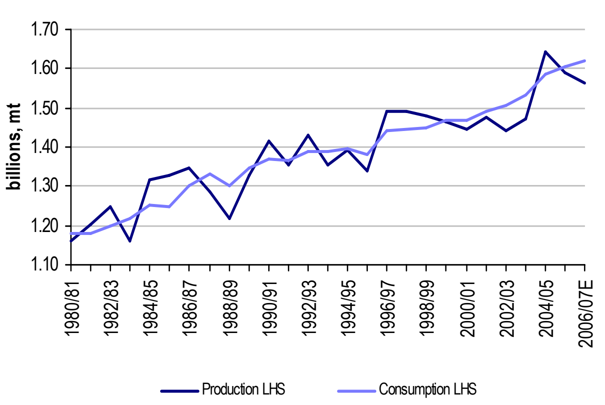


Source: United Nations, World Bank, UBS estimates

Low grain stocks to cause accelerated planting in the near term

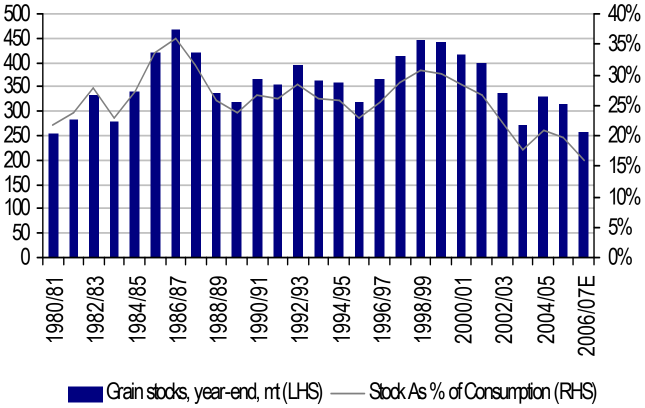
In addition to longer-term demand drivers, the very low level of global grain stocks (which are close to their lowest on a days of consumption basis in over three decades) is likely to further stimulate high production and lead to higher fertilizer demand growth in the near term. Crop prices are an important determinant affecting fertilizer demand, though weather expectations also play a role in determining how much land a farmer will seed. Wheat, corn, rice and other cereals are the crops that use 60% of world fertilizer use, according to FAO (Food and Agriculture Organization). Corn is the largest consumer of fertilizer by acre.

Chart 14: Global grain production and consumption (wheat and coarse grain), 1980-2007E



Source: USDA

Chart 15: Global grain stocks and stock as % of consumption ratio, 1980-2007E



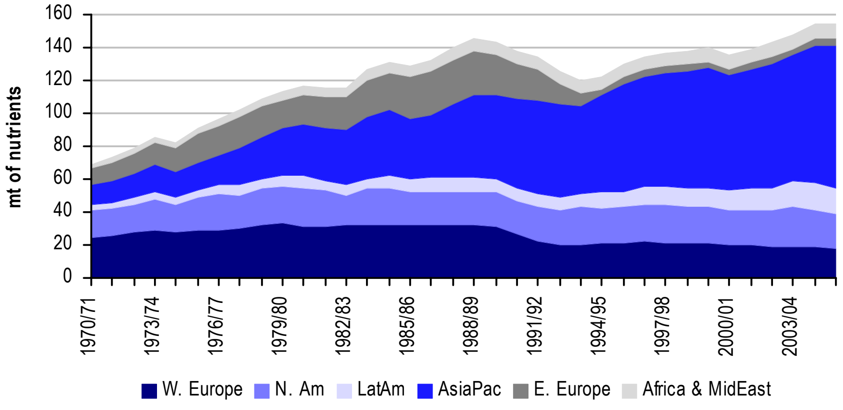
Source: USDA

Fertilizer demand by region

Brazil, India and China are key growth markets for fertilizer consumption

Regionality is a key issue in fertilizer markets. Demand growth for fertilizer in the developed world has stagnated in recent years, while China, Asia and Latin America have experienced significant growth. China's fertilizer consumption has increased at an average growth rate of over 10% over the past two to three years, and with N representing over 65%, there is clear upside for P and K. Growth in India, however, has been weak. Fertilizer consumption in Latin America averaged 4-5% per annum, with demand in Brazil rising at over 15% per annum.

Chart 16: Fertilizer demand by region, 1970-2005



Source: FAO, IFA

Furthermore, fertilizer is a regional business given the bulk nature of fertilizers which means companies tend to have a competitive advantage in their local markets given lower transportation costs. For example, the US potash market is primarily served by North American producers while the European market is serviced largely by the Russian and European producers all else being equal. Consequently, companies can have a competitive advantage due to their plant location and/or their investment in company-owned transportation and distribution infrastructure especially as transportation can represent up to 40% of delivered fertilizer costs.

Fertilizer supply/demand

Nitrogen—Low barriers to entry

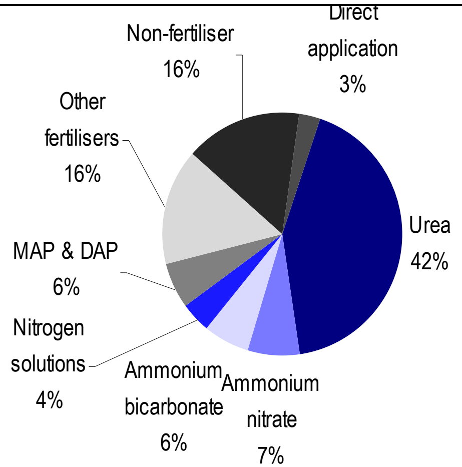
Ammonia is the base product for nitrogen fertilizers

Ammonia is the base product for nitrogen fertilizers. It is produced directly from a reaction between natural gas, steam and air. Generally, about 32 MMBtu of natural gas is required per short ton of ammonia. There are six major nitrogen products: urea, ammonium nitrate, ammonium phosphates, ammonium sulphate, nitric acid, and nitrogen solutions.

Ammonia can be used:

- in direct application to soil;
- in nitric acid, which may be used for industrial applications;
- in urea (the largest application of ammonia), which may be used for industrial applications, as well as fertilizer and feed; and,
- in liquid ammonium nitrate, which also has mixed applications.

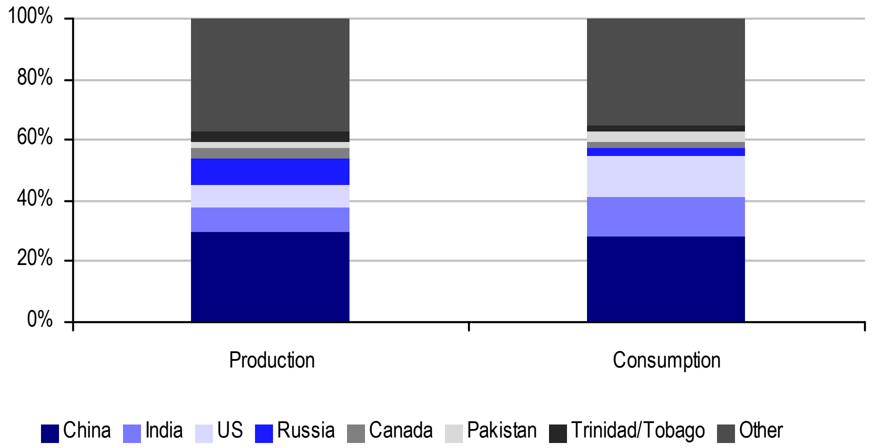
Chart 17: Major uses of ammonia



Source: Fertecon, PotashCorp

The nitrogen fertilizer industry is very fragmented. The top five producers account for less than 20% of global ammonia production capacity. This reflects the fact the industry has low barriers to entry – all that is required is capital and access to low-cost natural gas. With technology easily available for licensing, and natural gas accounting for 70-90% of the total cost of production, most of the new production capacity is being built in areas that offer cheap natural gas. The majority of the new ammonia and urea plants scheduled to come on stream are located predominantly in the Middle East, where there are significant amounts of stranded natural gas.

Chart 18: Production and consumption of nitrogen fertilizer by region, 2005

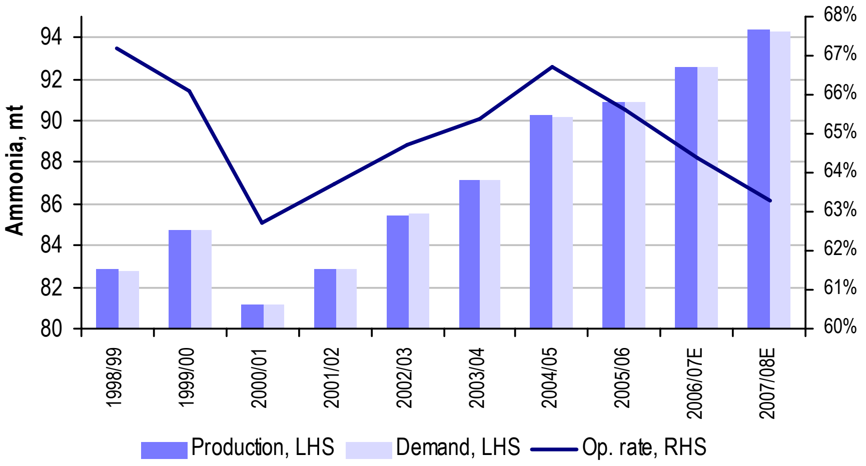


Source: IFA, USGS, UBS estimates

High gas prices over recent years have led to the idling of significant ammonia capacity

High gas prices and rising transport costs has meant that a significant amount of global ammonia capacity has remained idle in the past few years. This is particularly true for the facilities located in the former Soviet Union and North America. The issue of rising natural gas prices will be an ongoing problem for ammonia producers in North America, in our view. The Chinese industry differs by sourcing a large amount of its raw material from coal.

Chart 19: Nitrogen fertilizer supply/demand model, 1998-2007E



Source: IFA, IDFC, Fertilizer Week, UBS estimates

Table 3: Nitrogen fertilizer supply/demand model, 1998-2007E

Year	Total Consumption	% change	Total capacity	% change	Operating rate	Ammonia contract price ($/metric tonne)	% Change
1998/99	82.8	1.8%	123.3		67.2%	109	
1999/00	84.7	2.3%	128.2	4.0%	66.1%	130	19.3%
2000/01	81.2	-4.1%	129.4	1.0%	62.7%	205	57.7%
2001/02	82.9	2.1%	130.1	0.5%	63.7%	134	-34.6%
2002/03	85.5	3.1%	132.1	1.6%	64.7%	183	36.6%
2003/04	87.1	1.8%	133.2	0.8%	65.4%	248	35.5%
2004/05	90.2	3.6%	135.3	1.6%	66.7%	297	19.8%
2005/06	90.9	0.7%	138.5	2.4%	65.6%	348	17.2%
2006/07E	92.6	1.9%	143.8	3.8%	64.4%	320	-8.0%
2007/08E	94.3	1.9%	149.1	3.7%	63.3%	340	4.7%

Source: IFA, IDFC, Fertilizer Week, UBS estimates

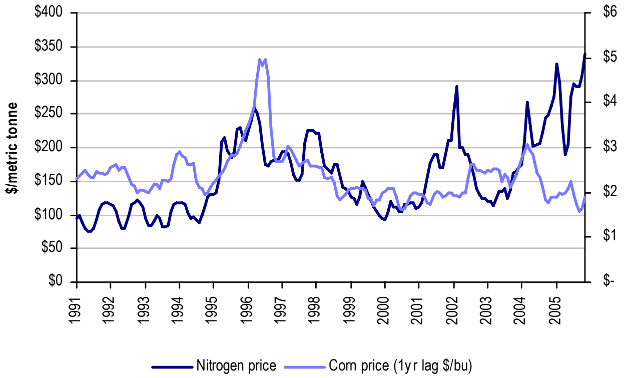
Like many other commodities, nitrogen prices are driven by supply and demand, as well as the cost of production and therefore gas prices. During periods of strong demand, nitrogen prices increase from cash cost levels and margins expand; conversely, weak demand will put pressure on nitrogen prices to breakeven levels. Our ammonia price forecast for 2006/07 and 2007/08 are driven by UBS's natural gas price forecast for these periods of $8.20/MMBtu and $8.70/MMBtu, respectively, as well as nitrogen supply/demand fundamentals.

There has generally been a positive relationship between grain and nitrogen fertilizer prices, as farmers spend more (less) on fertilizer during periods of high (low) grain prices. A more detailed discussion of grain pricing is highlighted in the "Equity Drivers" section. High fertilizer prices are typically followed by capacity additions which eventually impact operating rates and return prices to the cash cost level of marginal/high cost producers.

Nitrogen fertilizer prices generally follow the price of natural gas

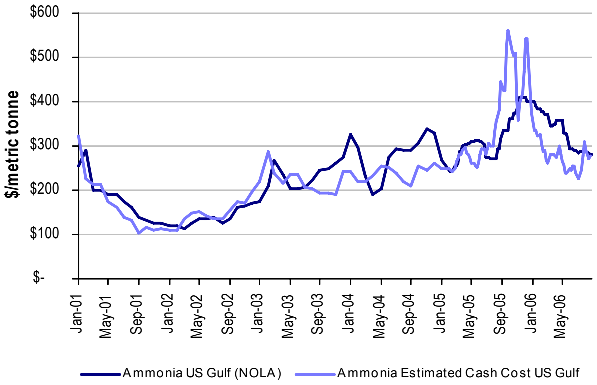
As can been seen in Chart 21, nitrogen fertilizer prices generally follow the price of natural gas, with the exception of periods of strong fertilizer demand and grain prices.

Chart 20: Ammonia vs. Corn



Source: Fertilizer Week, USDA

Chart 21: Ammonia price vs. estimated cash costs, 2001-Aug 06



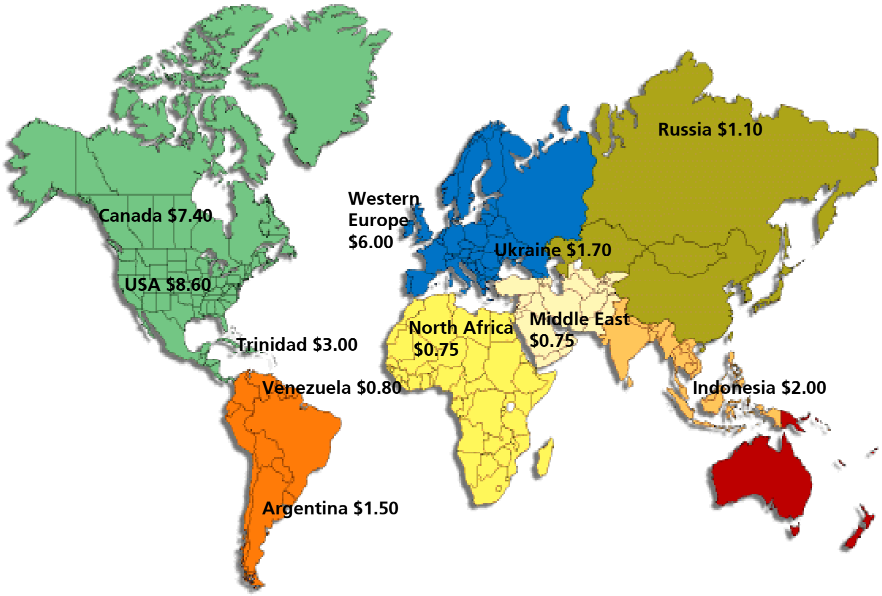
Source: Fertilizer Week, Reuters, UBS estimates

N.A. producers suffer from high natural gas costs

Nitrogen fertilizer producers in North America are at a disadvantage because of the high cost of natural gas

Nitrogen fertilizer producers in North America are at a disadvantage, primarily because of the high cost of natural gas. On average, gas prices in developed countries are more than double that of developing countries.

Chart 22: World Natural Gas Costs (US$/MMBtu, 2005 average)



Source: Terra Industries, Inc., UBS

We expect North American production of nitrogen fertilizer to decline in the long term, similar to the fate of other natural gas driven petrochemicals (i.e., ethylene, methanol).

Phosphate—Fighting oversupply

Phosphate fertilizer products are produced from phosphate rock

Essentially all phosphate products are produced from phosphate rock. Its diverse products and uses include: fertilizer, feed and industrial products. Fertilizer production accounts for about 85% of P_2O_5, with the remainder being used for feed and other industrial applications. Phosphate ore mined in the US is used primarily to manufacture phosphoric acid, which accounts for over 95% of the total phosphate ore mined in the US. Phosphoric acid is used as an intermediate in the production of ammonia phosphate fertilizers and animal feed supplements.

The United States, China and Morocco dominate phosphate rock production

Phosphate supply, though less consolidated than potash, depends on reserves of phosphate rock. The US, China and Morocco dominate the reserve base for phosphate rock (or apatite), although China is still a net importer. India also imports significant quantities.

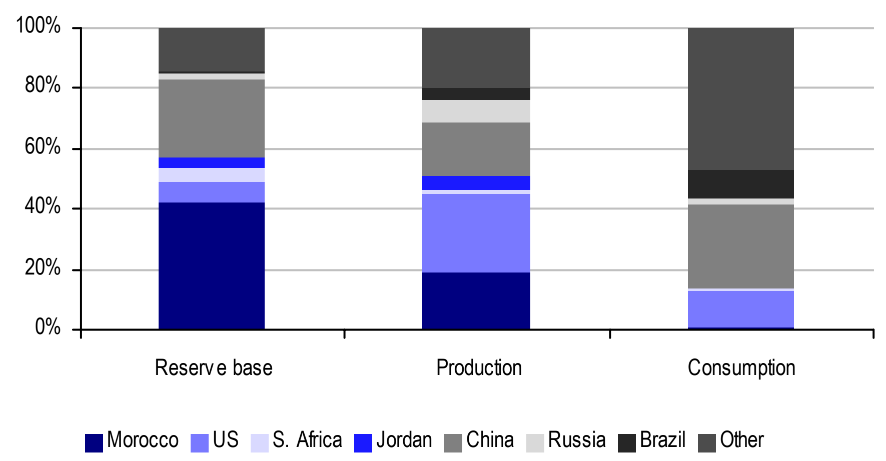
Table 4: Phosphate rock world mine production, reserves and resources

	2005 Production	Reserves	Reserves & Resources
United States	38,300	1,200,000	3,400,000
Morocco & Western Sahara	28,000	5,700,000	21,000,000
China	26,000	6,600,000	13,000,000
Russia	11,000	200,000	1,000,000
Tunisia	8,000	100,000	600,000
Jordan	7,000	900,000	1,700,000
Brazil	6,400	260,000	370,000
Other	4,900	800,000	2,000,000
Israel	3,200	180,000	800,000
Syria	3,000	100,000	800,000
Egypt	2,230	100,000	760,000
Australia	2,000	77,000	1,200,000
South Africa	2,000	1,500,000	2,500,000
Senegal	1,800	50,000	160,000
India	1,200	90,000	160,000
Togo	1,120	30,000	60,000
Canada	1,000	25,000	200,000

Source: US Geological Survey

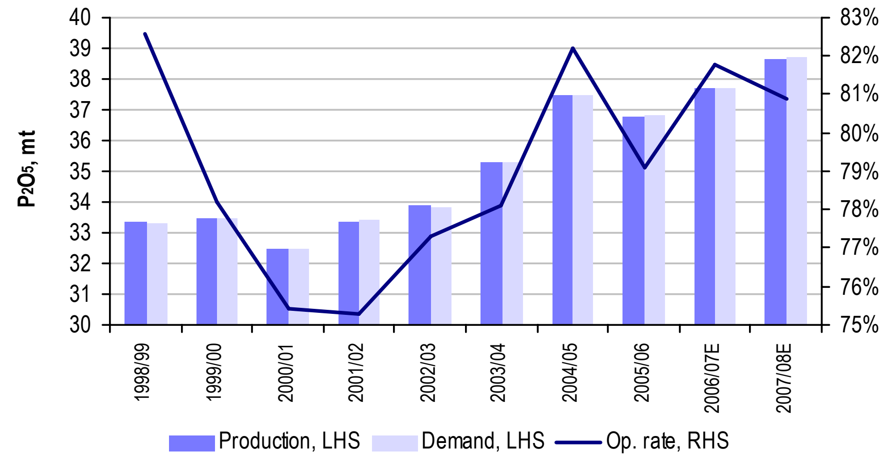
Despite China’s large reserve base of 6.6 billion tonnes (Table 4), the majority of its phosphate rock has a low P_2O_5 content and high impurity content. As a result, Chinese refining costs are materially higher than those in the United States.

Chart 23: Reserves, production and consumption of phosphate by region, 2005



Source: IFA, USGS, UBS estimates

Chart 24: Global phosphate (P2O5) supply/demand model, 1998-2007E



Source: IFA, IDFC, Fertilizer Week, UBS estimates

Table 5: Global phosphate (P_2O_5) supply/demand model, 1998-2007E

Year	Total Consumption	% Change	Total Capacity	% Change	Operating Rate	DAP contract price($/metric tonne)	% Change
1998/99	33.3	-	40.4		82.6%	173	
1999/00	33.5	0.4%	42.8	6.0%	78.2%	150	-13.3%
2000/01	32.5	-3.0%	43.1	0.7%	75.4%	152	1.3%
2001/02	33.4	2.7%	44.3	2.7%	75.3%	138	-9.2%
2002/03	33.8	1.4%	43.8	-1.1%	77.3%	154	11.6%
2003/04	35.3	4.3%	45.2	3.2%	78.1%	177	14.9%
2004/05	37.5	6.2%	45.6	0.9%	82.2%	202	14.1%
2005/06	36.8	-1.8%	46.5	2.0%	79.1%	227	12.4%
2006/07E	37.7	2.6%	46.1	-0.8%	81.8%	235	3.5%
2007/08E	38.7	2.6%	47.8	3.7%	80.9%	235	0.0%

Source: IFA, IDFC, Fertilizer Week, UBS estimates

Mosaic has tightened the market materially by closing a phosphate rock mine and two processing facilities in May

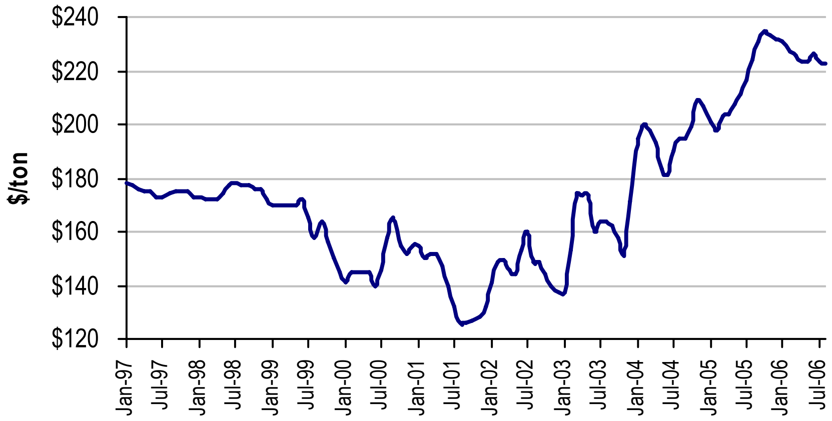
On 3 May 2006, The Mosaic Company announced plans to indefinitely close two phosphate plants and one phosphate rock mine at the end of May, reducing capacity by roughly 1.3 million tonnes of Diammonium Phosphate (DAP) and Monoammonium Phosphate (MAP) annually. With the closure of the Fort Green mine (annual capacity of 4.9 million tonnes of phosphate rock), Mosaic's mine capacity will be 15 million tonnes. The Fort Green mine had high cash costs because of the larger distance between its operating and processing facilities, and despite its high operation rates, was producing the lowest-quality rock. The closure of Mosaic's Green Bay and South Pierce processing plants has resulted in the removal of about 11% of US phosphate fertilizer supply (P_2O_5 basis) and about one-fifth of Mosaic's capacity. We expect the closure of Mosaic's facilities to encourage tight market conditions for at least the next year, until we see capacity additions in Morocco, China and elsewhere in 2007/2008 (Table 6).

Table 6: Phosphate projects, P_2O_5

Project	Country	Status	Potential startup	Capacity (000s tonnes)	Percent of 2006 global capacity
Jiangyin	China	Under construction	2006/2007	130	0.3%
Jorf Lasfar	Morocco	Under construction	2007/2008	750	1.6%
Haikou IV	China	Under construction	2007/2008	600	1.3%
Laskhira II	Tunisia	Under construction	2007/2008	175	0.4%
Anning County II	China	Planned	2007/2008	600	1.3%
Djebel Onk I	Algeria	Planned	2007/2008	175	0.4%
Djebel Onk II	Algeria	Planned	2007/2008	175	0.4%
Dinh Vu	Vietnam	Planned	2007/2008	160	0.3%
Yichang II	China	Planned	2007/2008	120	0.3%
Ambalamedu	India	Expansion	2007/2008	45	0.1%
Al Jalamid	Saudi Arabia	Planned	2008/2009	780	1.7%
Kandla	India	Planned	2008/2009	500	1.1%

Source: IFDC, UBS estimates

Chart 25: Monthly DAP Central Florida prices, 1997-Aug 06



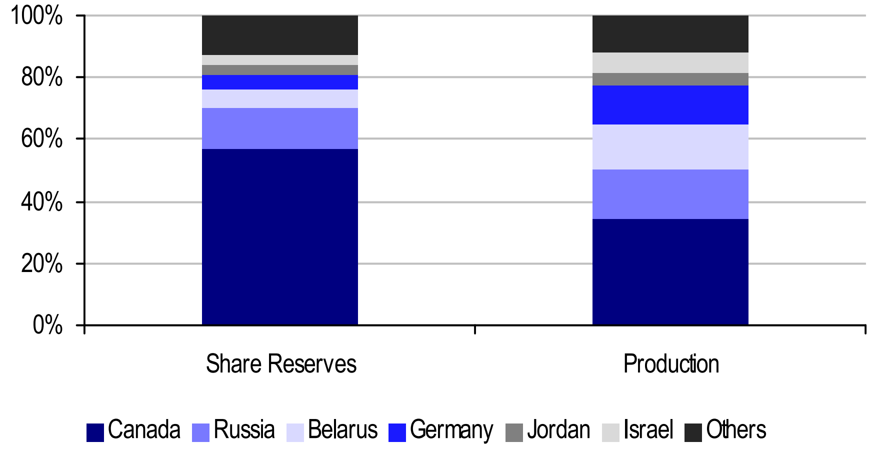
Source: Fertilizer Week

Potash—Our preferred nutrient

Potash supply is concentrated in the hands of a small number of producers

Potash supply is extremely concentrated, with the top ten global producers (dominated by Potash Corporation of Saskatchewan (PotashCorp), Belaruskali and Mosaic) controlling nearly 85% of global capacity. Production is concentrated in Canada, which accounts for about 30% of world production, and Eastern Europe, where Russia accounts for 18% and Belarus 15%. Most potash is mined from underground mines, although the potash that is extracted from the Dead Sea by Israel Chemicals and Arab Potash is cheaper than in other regions as it employs solar evaporation.

Chart 26: Reserves and production of potash by region, 2005

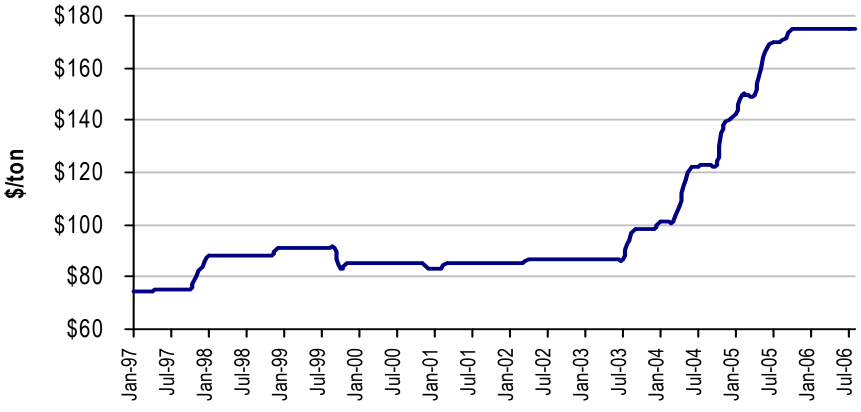


Source: USGS

We expect operating rates to continue to rise in the near term

PotashCorp has historically chosen to idle a significant portion of its capacity in order to ensure attractive industry pricing. Potash accounts for approximately 70% of the world's unutilized potash capacity. Despite recent announcements of capacity additions, we expect a nearly balanced market and expect producers to continue to match production to demand. We note, capacity that is currently off-line will require time and investment before it can begin production. It takes approximately five years to plan, construct, and commission a greenfield potash operation.

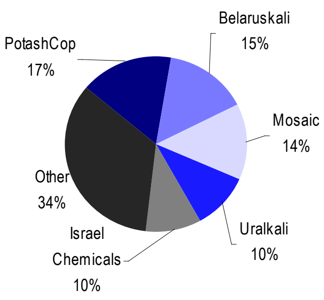
Chart 27: Monthly potash (FOB Sask, coarse prices) 1997-present



Source: Fertilizer Week

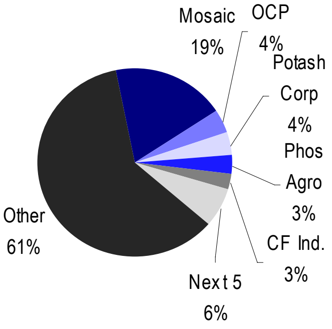
We believe the potash business shows the most potential of the fertilizer markets due to the consolidated nature of the industry. Furthermore, potash does not face the prospect of rapidly rising feedstock costs and/or as significant new international competition which nitrogen and phosphate are likely to contend with over coming years.

Chart 28: Top potash producers, KCl)



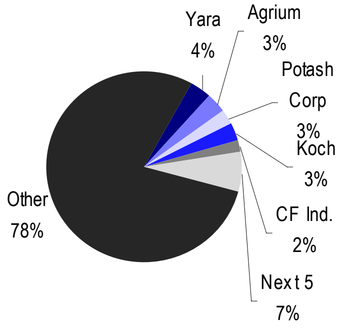
Source: Fertecon, PotashCorp, UBS estimates

Chart 29: Top phosphate producers



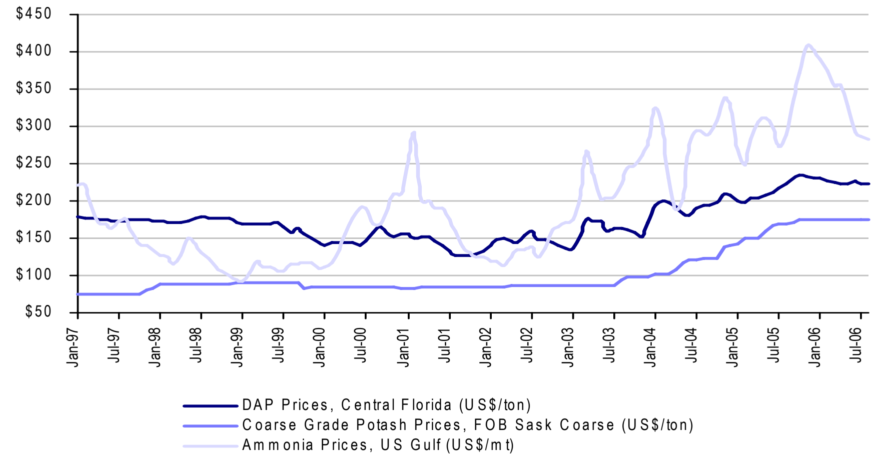
Source: Company data, UBS estimates

Chart 30: Top ammonia producers



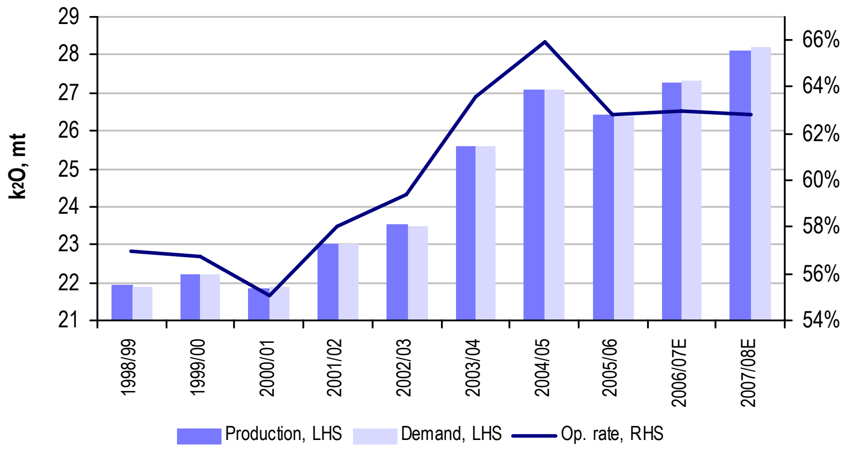
Source: Company data, UBS estimates

Chart 31: Fertilizer price comparison, 1997-present



Source: Fertilizer Week

Chart 32: Global potash (K_2O) supply/demand model, 1998-2007E



Source: IFA, IDFC, Fertilizer Week, UBS estimates

Table 7: Global potash (K_2O) supply/demand model, 1998-2007E

Year	Total Consumption	% Change	Total Capacity	% Change	Operating Rate	Potash price ($/metric tonne)	% Change
1998/99	21.9	-73.0%	38.5		57.0%	90	
1999/00	22.2	1.2%	39.2	1.9%	56.7%	86	-4.4%
2000/01	21.9	-1.6%	39.6	1.1%	55.1%	85	-1.2%
2001/02	23.0	5.3%	39.7	0.2%	58.0%	86	1.2%
2002/03	23.5	2.1%	39.6	-0.4%	59.4%	87	1.2%
2003/04	25.6	8.7%	40.2	1.6%	63.6%	102	17.2%
2004/05	27.1	6.0%	41.1	2.3%	65.9%	141	38.2%
2005/06	26.4	-2.4%	42.1	2.5%	62.8%	174	23.4%
2006/07E	27.3	3.2%	43.3	2.8%	63.0%	180	3.4%
2007/08E	28.2	3.2%	44.8	3.6%	62.8%	200	11.1%

Source: IFA, IFDC, Fertilizer Week, UBS estimates

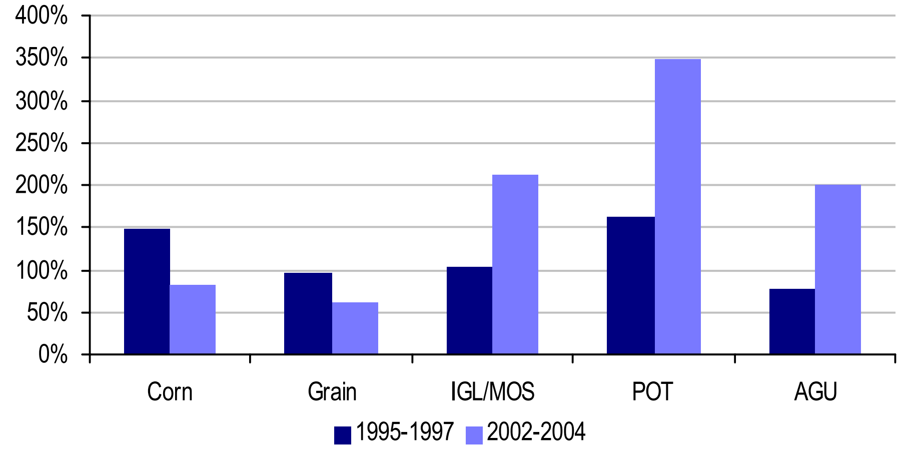
Equity drivers

Corn/grain prices

Historically, one of the key variables in projecting fertilizer share performance has been the price of corn (and to a lesser extent grain). The last time corn and grain prices surged (1996 and 2004), fertilizer stocks produced returns in excess of 100%.

Strong corn prices have coincided with strong performance from fertilizer stocks

Chart 33: Corn/grain prices vs. fertilizer stocks



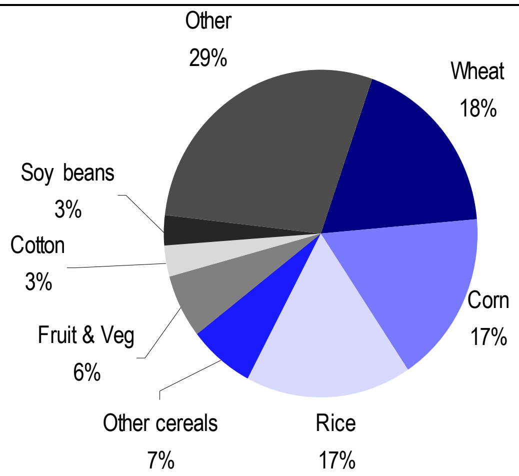
Note: Price moves above are peak to trough for the time periods noted. Further note that IGL is a predecessor company to Mosaic.
Source: Reuters

Corn pricing is one of the key determinants of the direction of the fertilizer sector, as high corn prices generally signal that farmers will elect to devote more acres to corn in the upcoming season and/or will increase fertilizer application rates per acre. This is of great significance to fertilizer producers given that corn is the most fertilizer-intensive crop.

High corn prices generally signal that farmers will elect to devote more acres to corn in the upcoming season

High grain prices stimulate farmers to maximize production by planting a large number of acres and adopting a high rate of fertilization to maximize yields. Conversely, when grain prices are depressed, farmers have less incentive to plant and will cut back on fertilizer consumption. In the US, corn is the largest consumer of fertilizer and also contributes the most to nutrient depletion in the soil. Thus, planted acreage for US corn is viewed by many as a leading indicator for domestic fertilizer demand.

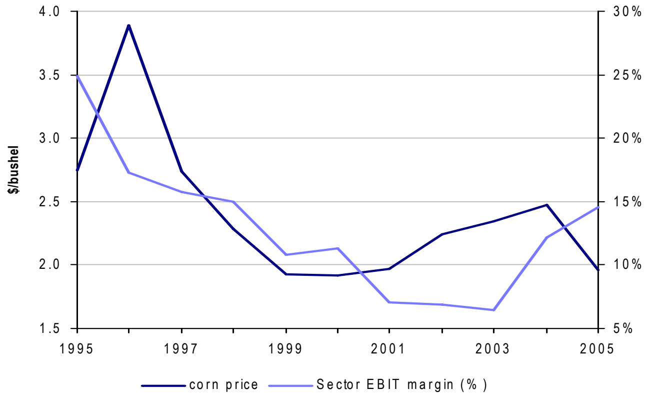
Chart 34: World fertilizer consumption by crop



Source: PotashCorp

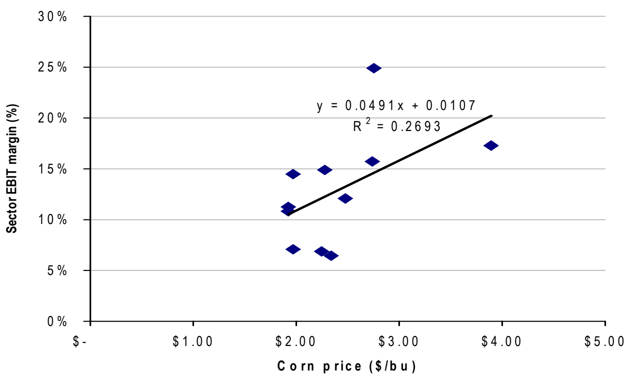
Historically, high corn (and grain) prices have led to strong profits in the fertilizer industry. As shown in Chart 35 and Chart 36, there is a general increase in EBIT margin when corn prices are high although we note this can be distorted somewhat on an annual basis due to the mix of international sales and products.

Chart 35: EBIT margin vs. corn price



Source: Company reports, USDA

Chart 36: EBIT margin vs. corn price



Source: Company reports, USDA

In general, the easiest way to identify price trends is to track stocks-to-use ratios, which indicate the supply of corn relative to demand by dividing corn stocks at the end of the crop season (inventories) by the total usage of the crop during the season in question. Lower stocks-to-use ratios highlight that supplies are tightening, while higher ratios indicate that the market may be oversupplied.

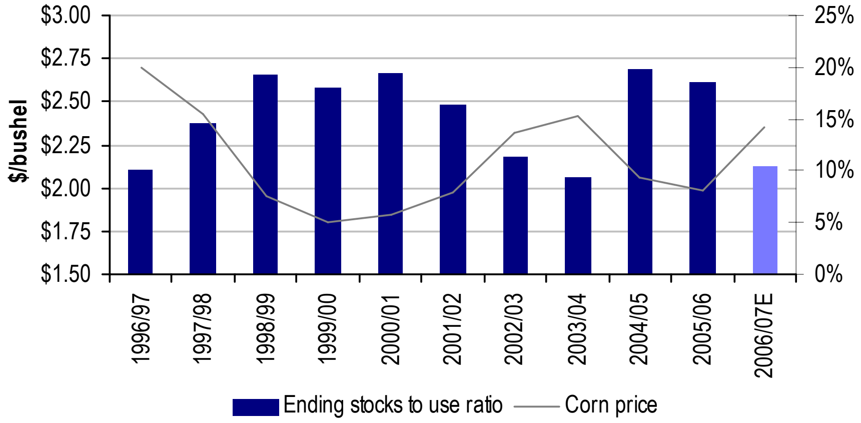
Corn prices tend to rise when the stocks-to-use ratio goes down

The stocks-to-use ratio as of August 2006 (i.e., the end of the 2005/06 crop year) is high by historical standards at 18.5%. We note, however, that growing ethanol production is forecast to lead to demand for over 2.1 billion bushels of corn in the 2006/07 corn year, an increase of 550 million bushels year-over-year. As a result, US corn inventories are forecast by the USDA to decline by about 800 million bushels, which would lead to a stocks-to-use ratio of 10.4%, well below the 10-year average level of 15.7%. We note that the USDA's 2006/07 forecast implies the second strongest level of corn production on record. This level of production though is not expected to meet demand given the growth in demand related to ethanol. Should the USDA's baseline forecast play out, it is easy to become very bullish on the prospects for corn prices going forward, as ethanol-related demand crowds out exports and animal feed applications, thereby pushing pricing higher over coming years.

It is easy to become very bullish on the prospects for corn prices going forward as ethanol-related demand crowds out exports and feed applications

Corn inventories look set to decline materially over the coming year despite the USDA's forecast of the second strongest crop on record

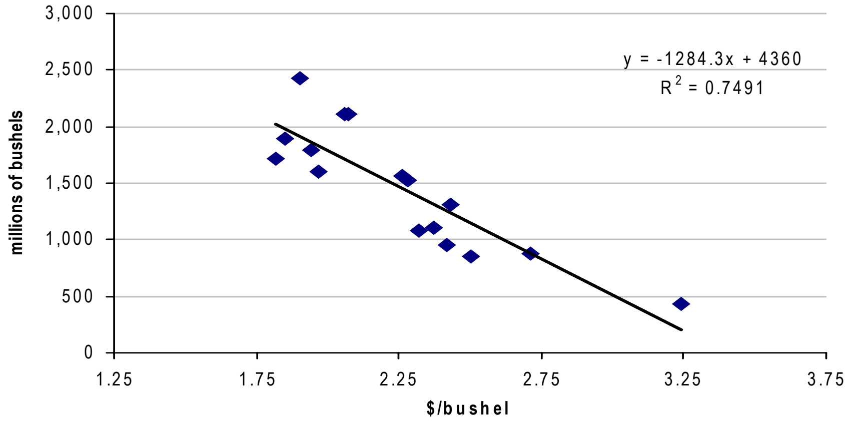
Chart 37: US corn price vs. ending stocks-to-use ratio



Source: USDA

Chart 38: Ending corn inventories vs. corn price

Ending US corn inventories have shown a strong inverse correlation with corn prices



Source: USDA

The ethanol wildcard

Ethanol economics have improved as oil prices have increased

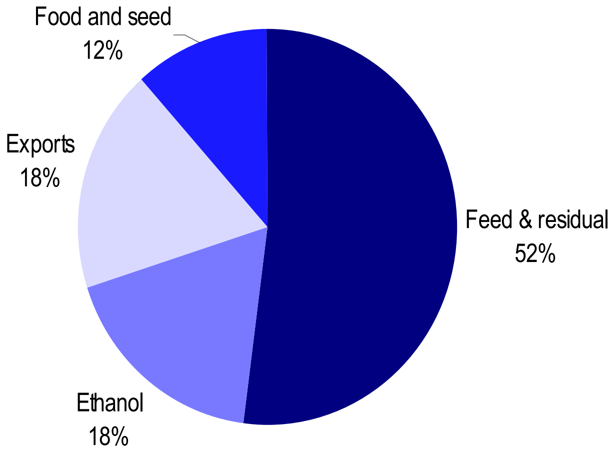
Rising world oil prices and security of supply concerns have, in recent years, heightened interest in alternative sources of liquid fuels such as ethanol. Ethanol can be blended into gasoline readily at up to 10% by volume. All cars and light trucks built for the US market since the late 1970s can run on gasoline containing 10% ethanol. Automakers also produce a limited number of vehicles for the US market that can run on blends of up to 85% ethanol (i.e., E85). In the US, most fuel ethanol is currently distilled from corn, while producers in Brazil and France use sugar cane and sugar beets, respectively.

Ethanol is the fastest-growing use for corn in North America, with a five-year CAGR of 18%

Ethanol is the fastest-growing use for corn in North America, with a five-year compound annualized growth rate of 18%. The USDA estimates that over 2.1 billion bushels, or 18% of US corn production in the 2006/07 corn year, will be used to produce ethanol, compared with just 7% five years ago. Corn use for ethanol production in the 2005/06 corn year was roughly 1.6 billion bushels, up 21% from 2004/2005 levels. In 2002/03 and 2003/04, corn use for ethanol production increased by roughly 17% and 13%, respectively.

Ethanol is now tied with exports as the second-largest use of US corn production

Chart 39: US corn end uses, 2006/2007E



Source: USDA, UBS

Growth in US ethanol production should continue at double- digit rates

The Energy Policy Act has set minimum standards for renewable fuels consumption

The strong growth in US ethanol production is virtually mandated by law as a result of the Energy Policy Act (EPACT) of 2005. EPACT created a Renewable Fuels Standard that established minimum thresholds for renewable fuel use, the vast majority of which will be satisfied by ethanol. The Act calls for the use of 4.7 billion gallons of renewable fuel in 2007, escalating to 7.5 billion gallons in 2012 (a CAGR of 10%).

Table 8: Renewable Fuels Standard established in EPACT

	Renewable Fuels (billions of gallons)
2006	4.0
2007	4.7
2008	5.4
2009	6.1
2010	6.8
2011	7.4
2012	7.5

Source: EPACT, Renewable Fuels Association

The Renewable Fuels Standard implies a minimum 10% CAGR in ethanol production through 2012

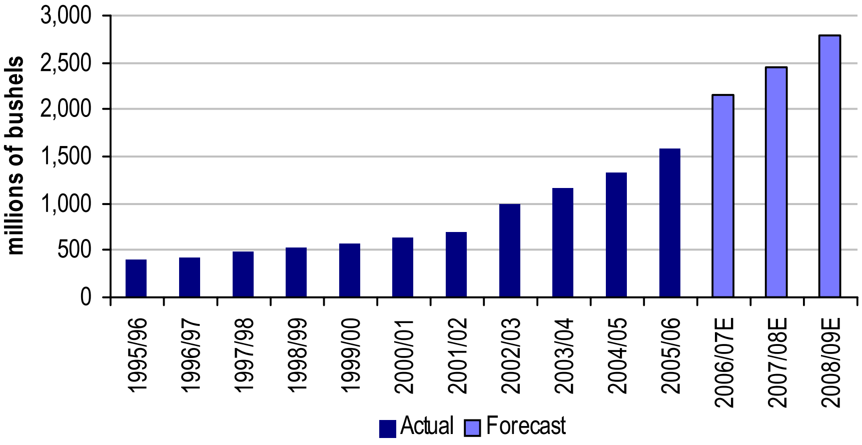
We expect ethanol production will grow at rates well beyond the minimum standards established in EPACT

We expect ethanol production will grow at rates well beyond the minimum standards established in EPACT. Current US ethanol capacity is 4.8 billion gallons spread across 101 plants. In addition, there are 44 new plants under construction and 7 expansion projects representing incremental capacity of 3.0 billion gallons that should start up in coming years. Industry consultant Doane Advisory Services estimates that 80 corn-based ethanol plants will start up over the next two years and that capacity will grow to 7.6 billion gallons by August 2007.

We expect corn used for ethanol production to grow less rapidly than ethanol demand as a whole

Any way you choose to parse the data, US ethanol production is likely heading higher and is highly likely to be the single largest driver of corn demand growth over coming years. We expect corn used for ethanol production, however, to grow less rapidly than ethanol demand as a whole due to the increasing efficiency of ethanol producers. Five years ago, the average US ethanol plant could produce 2.5 gallons of ethanol from each bushel of corn. Modern ethanol plants starting up today are capable of producing 2.8 gallons of ethanol from each bushel of corn. As ethanol technology improves via improved corn fibre conversion and biotech corn specifically tailored for ethanol production, we expect this 2.8 figure will increase beyond 3 gallons per bushel. While this development is positive for ethanol producers, it is likely to lead to a slower growth rate in corn demand than would otherwise have taken place.

Chart 40: US corn used to produce ethanol, 1995 – 2009E



Source: USDA, UBS estimates

Seasonal patterns

Fertilizer sales and income are focused in the spring

Sales of fertilizer products to agricultural customers are typically seasonal in nature and usually generate a greater amount of income in the spring in the northern hemisphere. However, results can vary significantly from one year to the next, primarily because of weather-related shifts in planting schedules and purchasing patterns, as well as the relationship between natural gas and nitrogen prices. In addition, the seasonal nature of the industry requires significant working capital for inventory in advance of the spring planting season.

Fertilizer share prices tend to perform well in the fall

Due largely to the seasonal nature of the agricultural industry, fertilizer share prices tend to recover in the period beginning in late summer through to the end of May, once the bulk of the North American spring plantings are complete. Share prices often appreciate in the mid to latter part of the year, as investors anticipate a rebound in the following year, only to be disappointed should a poor spring fertilizer application season occur.

Table 9: Agricultural schedule

	Seeding Months	Harvest Months
Corn		
US	Apr-May	Oct-Nov
S. China	Feb-Apr	Jul-Aug
Brazil	1st Crop-Oct-Dec	Feb-Jun
	2nd Crop Jan-Feb	Jun-Sept
Argentina	Oct-Dec	Mar-Jun
W. Europe	Mar-May	Sep-Nov
Wheat		
US-Winter	Sept-Oct	Jun-Aug
US-Spring	Apr-May	Jul-Sept
Canada-Spring	May-Jun	Aug-Oct
China-Winter	Sept-Oct	May-Jun
Argentina-Winter	Jun-Aug	Nov-Jan
Australia	May-Jul	Oct-Dec
Soybeans		
US	May-Jun	Oct-Nov
Brazil	Oct-Dec	Mar-May
Argentina	1st Crop-Nov-Jan	Apr-May
	2nd Crop-Dec-Jan	May-Jun
Canada	May-Jun	Sept-Nov
Rice		
US	Apr-May	Sept-Oct
India	May-Aug (Kharif)	Oct-Jan
	Nov-Feb (Rabi)	Mar-May
China	Apr-May (single crop)	Aug-Sep
	Mar-Apr (dble crop-early)	Jun-Jul
	Jun-Jul (dble crop-late)	Oct-Nov
Brazil	Nov-Dec (centre-south)	Feb-May
	Jan-Feb (N & NE)	Jun-Aug

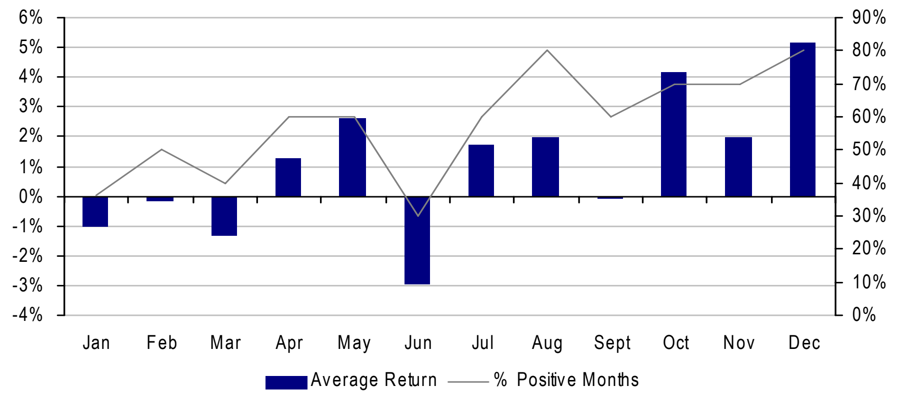
Source: USDA, FAS, Agrium

This is highlighted by the share price performance for PotashCorp and Agrium over the past ten years (1996-2005) for the ten-month period from August through May. As illustrated in Chart 41. Agrium's shares have averaged a ten-month return of approximately 11.7%. Taking an even narrower focus, the fertilizer shares tend to see two periods of superior share price performance, namely August through December and April through May. From 1996-2002, Agrium averaged returns of 8.2% and 5.3% for the August - December and April - May periods, respectively.

Similarly, PotashCorp shares performed well during the ten-month period August through May, averaging a 10-month return of approximately 8.2%. Moreover, PotashCorp shares performed even better when taking a narrower focus. During the years 1996-2005, the shares averaged returns of 11.0% for the period August - December, and 4.9% for the April - May period.

Chart 41: Seasonal performance of Agrium and Potash, 1996-2005

Fertilizer stocks tend to perform best in the fall while the US corn crop is being harvested



Source: Reuters, UBS

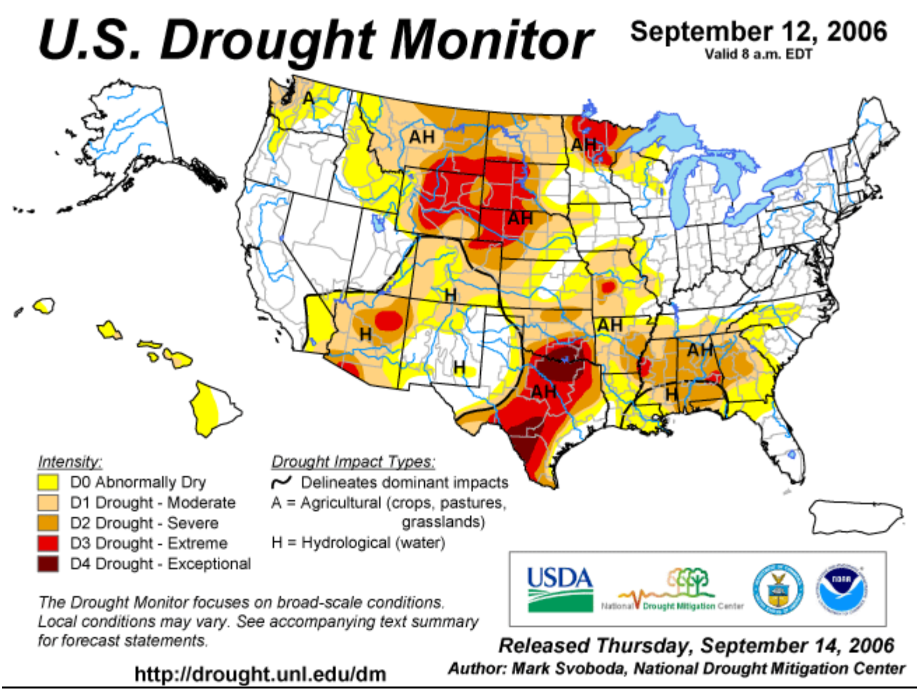
Weather

Weather can have a significant impact on fertilizer application rates, crop yields and consumption

Weather can have a significant impact on fertilizer application rates, crop yields, consumption and myriad other factors that ultimately impact the fertilizer industry. Poor growing conditions in key crop production regions (i.e., the US Midwest) can have a negative impact on crop yields/production, which in turn tends to drive down agricultural commodity inventories and drive up prices of corn, wheat, etc. This in turn tends to encourage farmers to increase fertilizer consumption for the next season in an effort to take advantage of high prices for affected commodities.

Conversely, favourable growing conditions tend to drive up yields, thereby flooding the market with agricultural products and driving down demand for fertilizer.

Chart 42: US drought monitor


U.S. Drought Monitor
September 12, 2006
Valid 8 a.m. EDT
A
AH
AH
AH
H
H
H
AH
AH
AH
H
Intensity:
D0 Abnormally Dry
D1 Drought - Moderate
D2 Drought - Severe
D3 Drought - Extreme
D4 Drought - Exceptional
Drought Impact Types:
Delineates dominant impacts
A = Agricultural (crops, pastures, grasslands)
H = Hydrological (water)
The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.
USDA
National Drought Mitigation Center
http://drought.unl.edu/dm
Released Thursday, September 14, 2006
Author: Mark Svoboda, National Drought Mitigation Center

Source: National Drought Mitigation Center

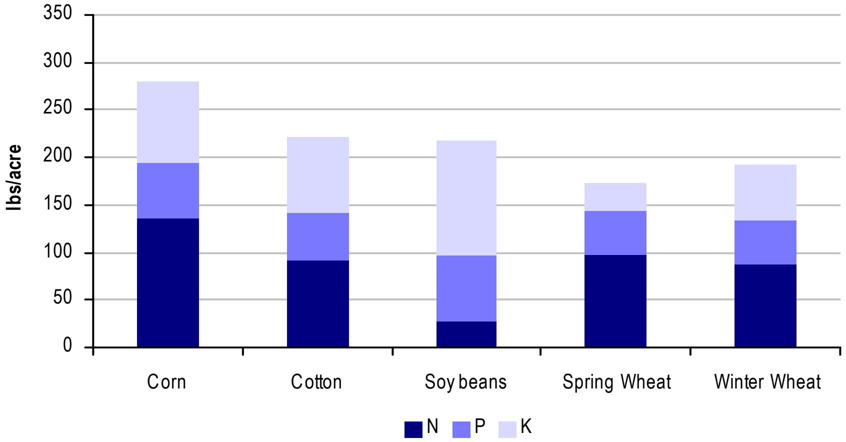
Risks

Farm economics

Fertilizer products are ultimately sold to farmers. As such, any event that diminishes a farmer's desire and/or ability to purchase fertilizer has the potential to impact demand for fertilizer, and ultimately profitability for Agrium, CF Industries, Mosaic and PotashCorp. Weak prices for any of the major agricultural products (corn, wheat, soybeans, etc.) will reduce a farmer's incentive to increase plantings of that crop for the upcoming season. Furthermore, weak corn pricing relative to soybeans (or other crops that compete with corn for acreage) can have negative consequences for fertilizer producers, given that corn is such a fertilizer-intensive crop.

Any event that diminishes a farmer's desire and/or ability to purchase fertilizer has the potential to impact demand

Chart 43: US fertilizer application rates by major crop



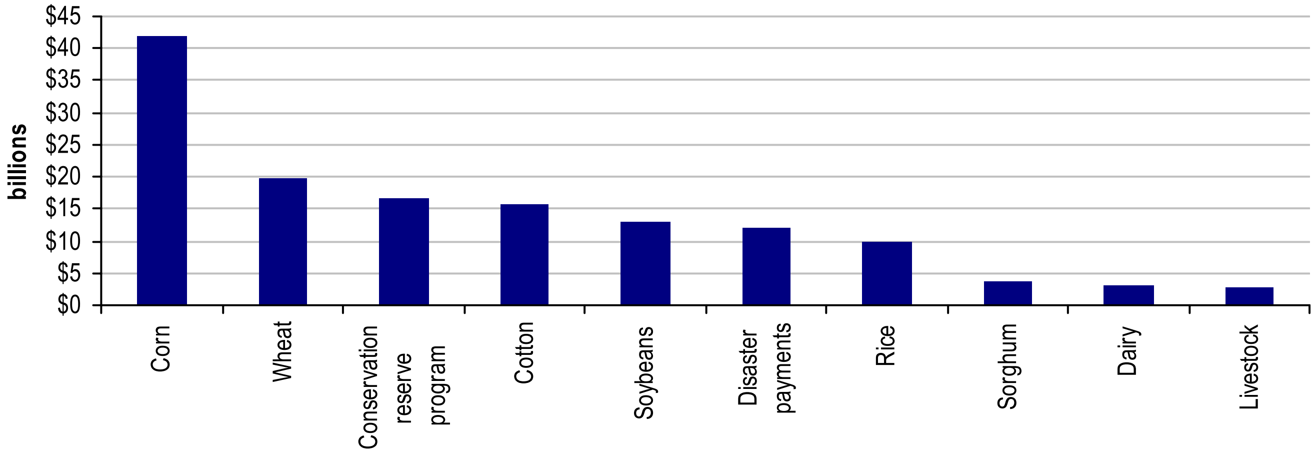
Source: IFA, USGS, UBS estimates

Government legislation

Production of agricultural products is highly subsidized in many parts of the world. Estimates of subsidies, tax-incentives, price-stabilization programs and the like exceeded $40 billion in the United States for corn alone from 1995 through 2004 (see Chart 44). A reduction in government assistance and/or support of agricultural industries could hurt fertilizer demand and/or pricing.

Production of agricultural products is highly subsidized

Chart 44: US government subsidies, total 1995-2004



Source: Environmental Working Group

Ethanol is subsidized to the tune of $0.52 per gallon

Distinct from programs designed to encourage crop production, the US government has exempted ethanol from the federal gas tax, which equates to a 52 cent per gallon subsidy for fuel with a 10% ethanol blend (i.e., gasohol). Any change in this subsidy could have a material impact on ethanol economics.

Ethanol's dominance of gasoline oxygenates may not last (just ask an MTBE producer)

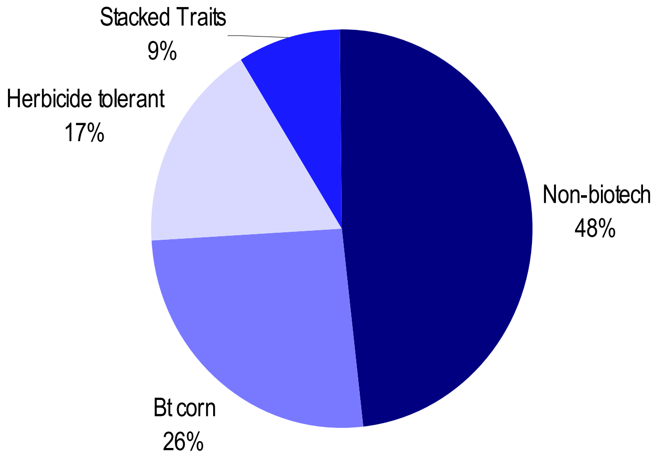
We note that throughout much of the 1990s, MTBE was the oxygenate of choice for many gasoline blenders. Concerns regarding MTBE's potential to contaminate drinking water led to that product's virtual elimination from the United States in favour of ethanol. While ethanol is currently the most popular biofuel in the U.S, that position is by no means permanent in nature. In additional, while US ethanol is currently produced almost exclusively from corn today, competing technologies could see switchgrass, sawdust, cereal straws or other feedstock take share from corn in the future.

Genetically modified seeds

Genetically modified seeds may reduce demand for fertilizer

US farmers have increasingly turned to genetically modified (or engineered) seeds in order to improve crop yields, offer disease protection, reduce spoilage and generally produce greater profitability per acre. In 2005, genetically modified seeds accounted for more than half of US corn acres planted.

Chart 45:Biotech share of US corn acres planted, 2005



Source: NCGA, USDA, NASS

Biotech seeds may reduce the frequency and severity of supply-side shocks to global crop markets

To the extent that biotech seeds continue to improve crop yields and reduce the frequency and severity of supply-side shocks to global crop markets, agricultural commodity prices are less likely to see severe upward price spikes. While such a development is positive for society en masse, fewer price spikes for corn, wheat, etc. are negative for fertilizer producers. Ultimately, one can view biotech seeds as a product that competes with fertilizer in that both products seek to improve crop yields.

Weather

Weather conditions are unpredictable and can have a significant impact on operations

Weather conditions are unpredictable and can have a significant impact on operations. Excessive rainfall and flooding can delay planting and hurt fertilizer sales and inventory valuation. Conversely, below-average rainfall and drought conditions can result in lower product demand, as farmers adjust the amount of acreage to be planted.

Natural gas prices

Natural gas makes up more than 90% of cash costs to produce ammonia

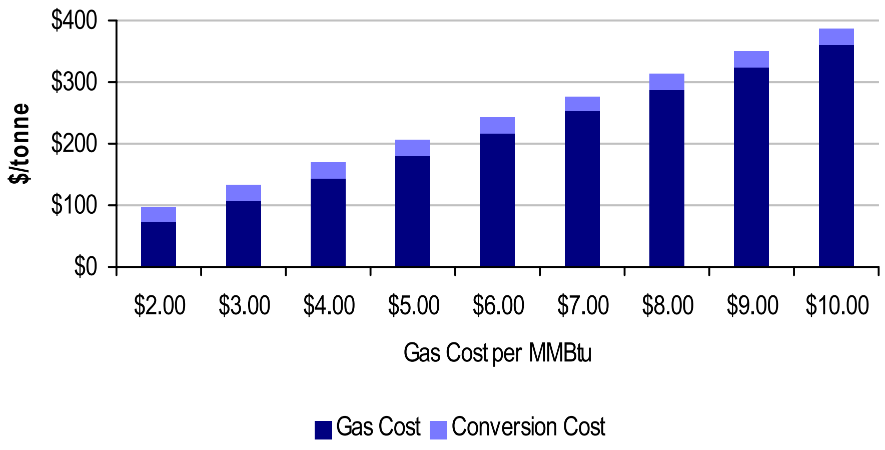
Natural gas is the primary raw material and fuel source used in the production of nitrogen and can account for over 90% of cash costs to produce ammonia. To produce one metric tonne of ammonia requires approximately 36 MMBtu of natural gas; thus, a US$1/MMBtu change in the cost of natural gas will affect production costs by approximately $36/tonne. Similar to nitrogen, phosphate is also linked to natural gas prices, as DAP and MAP requires 0.22 and 0.13 tons of ammonia, respectively (see Table 10). In addition, the production of phosphate also requires phosphoric acid, which is produced by the combination of ammonia and sulphuric acid—both of which are linked to gas pricing.

Table 10: Fertilizer inputs

One metric tonne of	Requires
Ammonia	36 MMBtus of natural gas
Ammonium Nitrate (34%)	0.21 metric tonnes of ammonia
	0.78 metric tonnes of nitric acid (100%)
Ammonium Sulfate	0.26 metric tonnes of ammonia
	0.74 metric tonnes of sulfuric acid
Diammonium Phosphate (DAP)	0.22 metric tonnes of ammonia
	0.85 metric tonnes of phosphoric acid (54% P2O5)
Monoammonium Phosphate (MAP)	0.13 metric tonnes of ammonia
	0.98 metric tonnes of phosphoric acid (54% P205)
Phosphoric Acid	3.5-4.0 metric tonnes of phosphate rock
	2.5 metric tonnes of sulfuric acid (100%)
Sulfuric Acid	0.33 metric tonnes of sulphur
Urea	0.58 metric tonnes of ammonia
	0.76 metric tonnes of carbon dioxide

Source: PotashCorp

Chart 46: Ammonia cost of production scenario analysis



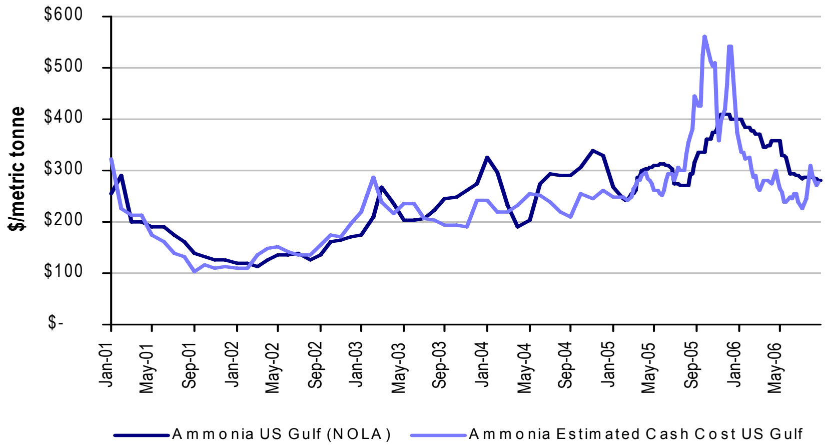
Source: UBS estimates

As a rule of thumb, one can estimate the price of ammonia using the following formula:

36 MMBtu/tonne of ammonia x Henry Hub Gas Price + US$26 / tonne for fixed costs

This formula approximates the cash cost of production for a US Gulf Coast nitrogen plant. As shown in Chart 47, this formula has been a good predictor of ammonia prices over the past number of years, although it is less accurate at very high gas prices (i.e., those seen in the fall of 2005).

Chart 47: Ammonia price vs. estimated cash costs, 2001-Aug 06



Source: Fertilizer Week, Yara, UBS

Environmental liabilities

The production of fertilizer involves the use of processes (including mining) and substances (i.e. ammonia) that are hazardous and/or have the potential to cause significant damage to the environment. While each of the companies in this space endeavours to minimize the risk of such an outcome, this risk cannot be reduced to zero. Ammonia is an explosive substance—any lapse in security or safety procedures could have dire consequences.

Investment strategies

There are a number of strategies one can employ depending on one's beliefs and/or assumptions regarding natural gas prices, relative prospects for one crop nutrient vs. another, and seasonality. We offer the following basic list of investment strategies as a starting point that is by no means exhaustive.

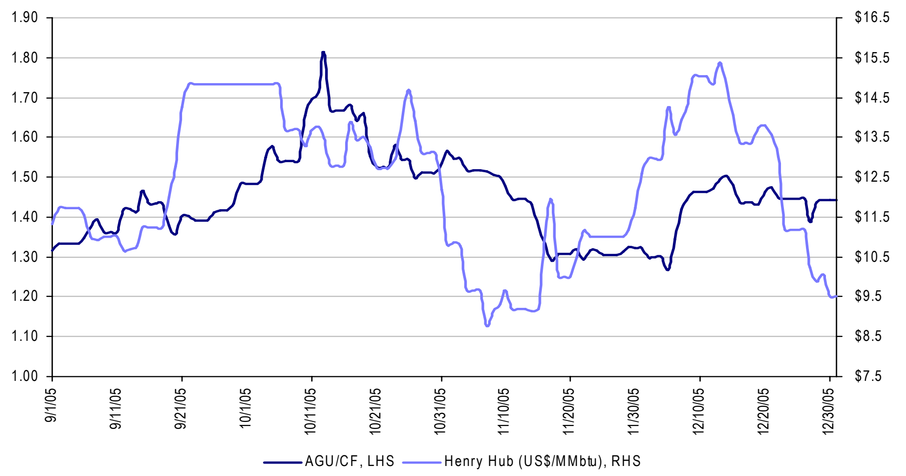
Natural gas prices

Nitrogen fertilizer plays can be viewed as derivatives on natural gas pricing

A strong view on natural gas pricing can be played via a number of the fertilizer stocks. Given that natural gas accounts for more than 90% of the typical North American nitrogen-based fertilizer producer's cash costs, a bullish view on natural gas is generally a negative event for a US Gulf Coast nitrogen fertilizer plant. A producer employing stranded natural gas with a price that is substantially fixed, however, would expect to see margins expand in the event of rising natural gas prices, as prices are pushed up to the marginal cost of the high-cost producer (often a US Gulf Coast plant). One simple strategy would be to go long or overweight Agrium in such a scenario and short or underweight CF Industries. In the event of falling US Gulf Coast natural gas prices, this strategy may be appropriate.

Agrium outperformed CF in the fall of 2005 as gas prices peaked, but underperformed as gas prices subsided

Chart 48: Agrium vs. CF Industries, 4Q05 (ie, post Katrina)



Source: Reuters

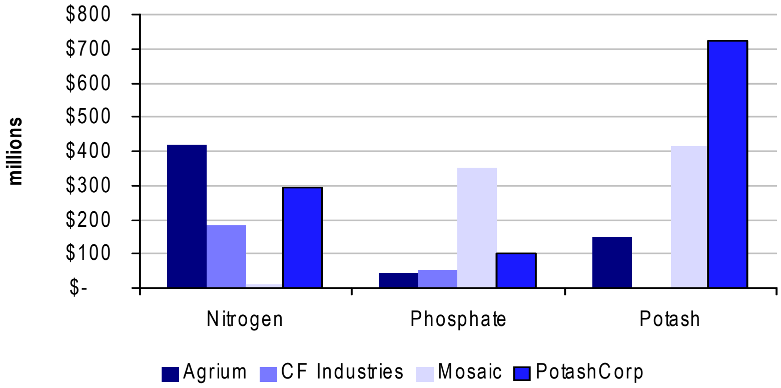
Weather

A view on the hurricane season (and subsequent impact on gas pricing), rainfall/drought conditions and government policy (i.e., support for ethanol subsidies) can all be played via fertilizer equities.

Nutrient preference

As shown in Chart 49, North American fertilizer companies have varying degrees of exposure to the three key crop nutrient segments. To the extent that one has a view on the outlook for nitrogen vs. potash one can adjust weighting to the various producers. CF is the closest thing to a pure play on North American nitrogen fertilizer, while PotashCorp is most levered to potash and Mosaic is most levered to phosphate.

Chart 49: EBITDA by segment, 2005



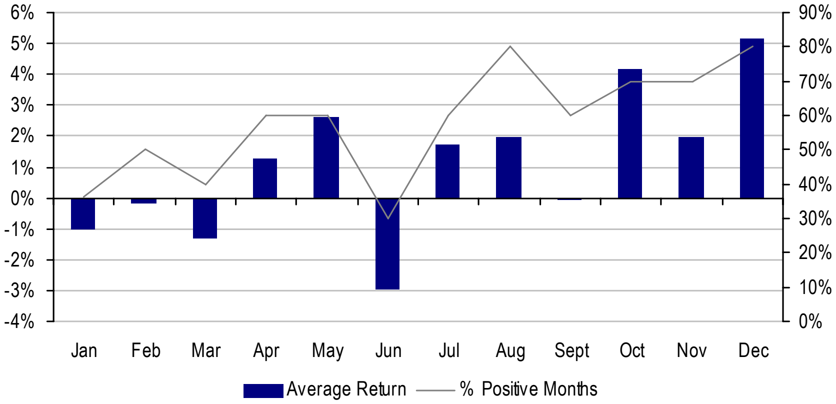
*Wholesale N.A. and S.A. segments only. Source: Company reports, UBS estimates

Seasonality

Fertilizer stocks tend to outperform in the fall and underperform in June

North American fertilizer stocks have posted a fairly consistent record of outperformance in the fall (October through December), with Agrium and Potash rising over 70% of the time during these months over the past decade. Furthermore, October and December have posted the strongest average return of any month for these names. Conversely, these two names have been down seven of the past ten years in June, with an average return in that month of nearly -3%. Adjusting weighting in this space during these periods would have added to annual returns over the past decade.

Chart 50: Seasonal performance of Agrium and Potash, 1996-2005



Source: Reuters, UBS

Event positioning

CF Industries is actively evaluating the potential of restructuring its Donaldsonville facility in order to reduce its exposure to natural gas in favour of petroleum coke (pet coke) technology. To the extent that one has a view on the attractiveness of pet coke and/or long-term natural gas prices in the US Gulf Coast, investors may want to position themselves appropriately in the name in advance of such news flow.

We expect speculation regarding Cargill's 65.3% equity stake in Mosaic will ramp up as we approach October 22, 2007 – the date after which Cargill is permitted to reduce its interest in the name (a standstill agreement is currently in place). To the extent that investors believe Cargill will take action on its stake in Mosaic once it is permitted to do so, a review of one's weighting in the name leading up to this date may be appropriate.

Valuation

We believe price to cash flow and EV/EBITDA are the most relevant valuation metrics for the North American fertilizer companies. EV/EBITDA and price to cash flow are less susceptible to variations from accounting treatment and generally are more comparable across companies, in our view. Table 11 outlines current and target valuation metrics for the North American fertilizer companies.

Agrium's earnings stability is aided by its advantaged gas feedstock and its retail business

Agrium currently trades at a material discount to both PotashCorp and Mosaic. In our view, Agrium is likely to experience less earnings volatility than its nitrogen peers because of its advantaged natural gas feedstock position in Alberta, Alaska and Argentina. Furthermore, the margins in its retail business are stable.

CF trades at the lowest multiple—deservedly so, in our view

CF Industries trades at the low end of its global peers on most metrics—a position we believe is warranted at the current time. CF is the smallest of the companies in question, with a market cap of under $1 billion, is mostly exposed to nitrogen, has no potash exposure and faces significant risk based on its dependency on US Gulf Coast natural gas. The operational risk at Donaldsonville, however, is mitigated by the company's conservative balance sheet (positive net cash).

Mosaic is the most expensive fertilizer stock in our global coverage universe

Based on our forecasts, Mosaic is the most expensive fertilizer stock in our global coverage universe. While the company has significant exposure to the potash business, we expect that its phosphate business will face longer-term challenges from rising international supply. We also note that Mosaic has the highest debt load of its peer group with a net debt to total capitalization of 41%.

We believe that PotashCorp's deserves to trade at a premium multiple

We believe PotashCorp deserves to trade at a premium multiple based on its significant exposure to potash and its superior margins. We note that excluding the company's investments in related potash companies and Sinofert would reduce its P/CFPS and EV/EBITDA multiples by approximately two to three multiple points.

Table 11: Valuation considerations

	Agrium Inc.	CF Industries	Mosaic	Potash Corporation
Share price	$26.01	$16.95	$16.66	$100.35
Market cap (millions)	$3,433	$932	$7,286	$10,424
Target	$29.00	$18.00	$13.00	$115.00
Rating	Buy 2	Neutral 2	Reduce 2	Buy 2
EBITDA margin 2007E	15.0%	6.8%	20.2%	32.1%
Net debt to cap	29.4%	-18.4%	38.2%	29.2%
Current P/CFPS	7.8	7.5	10.8	10.9
Target P/CFPS	8.7	7.9	8.5	12.5
Current EV/EBITDA	5.9	6.0	9.2	7.7
Target EV/EBITDA	6.5	6.4	7.7	9.0
Rating	Buy 2	Neutral 2	Reduce 2	Buy 2
Valuation considerations	Advantaged feedstock in Alberta, Alaska, Argentina; Stable margins from retail business	US Gulf Coast gas exposure; Market cap <$1 billion; No potash assets	Significant potash exposure; Cargill standstill agreement expires Oct-07	Worlds largest potash producer; Strongest margins in global fertilizer coverage universe

Source: Reuters, UBS

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Agrium Inc.

AECO and Argentina advantage

Large, low-cost, well-located nitrogen assets

Agrium is one of the largest North American nitrogen producers, with three of the most modern plants. The company's efficiency, access to lower-cost AECO gas, and favourable proximity to western US markets, allow for superior margins. Agrium also has a 50% interest in a one million tonne urea plant in Argentina, with access to very low cost gas and excellent proximity to growing South American markets.

Smaller exposure to potash and regional phosphate

Agrium also has exposure to the favourable potash market through its two million tonne Vanscoy operation. In phosphate Agrium has a profitable niche business in western Canada, which is somewhat insulated from international DAP markets.

Retail: a hidden asset?

Agrium operates a large and growing retail business, which was recently expanded via the acquisition of Royster Clark. Although this business has lower margins, it generates consistent profits and provides an additional outlet for wholesale products. With its stable and growing EBITDA, this ultimately could be a candidate for monetization.

Valuation

Applying an 8.7x multiple to our 2007E CFPS estimate of $3.33, we derive a price target of $29. Given the implied return, we rate the shares Buy 2.

Highlights (US$m)	12/04	12/05	12/06E	12/07E	12/08E
Revenues	2,838	3,294	4,206	4,219	-
EBIT (UBS)	467	500	374	479	-
Net income (UBS)	215	283	171	282	-
EPS (UBS, US$)	1.55	2.12	1.30	2.07	-
Net DPS (UBS, US$)	0.11	0.11	0.11	0.11	0.11

Profitability & Valuation	5-yr hist. av.	12/05	12/06E	12/07E	12/08E
EBIT margin %	-	15.2	8.9	11.4	-
ROIC (EBIT) %	-	41.0	24.7	27.0	-
EV/EBITDA x	-	4.1	6.9	5.9	-
PE (UBS) x	-	9.3	19.9	12.5	-
Net dividend yield %	-	0.6	0.4	0.4	0.4

Source: Company accounts, Thomson Financial, UBS estimates. (UBS) valuations are stated before goodwill, exceptionals and other special items.

Valuations: based on an average share price that year, (E): based on a share price of US$26.01 on 20 Sep 2006 17:21 EDT

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Americas

Chemicals, Specialty

Rating	**Buy 2** ***Unchanged***
Price target	**US$29.00** ***Unchanged***
Price	**US$26.01**

RIC: AGU.N BBG: AGU US

Trading data	
52-wk. range	US$28.33-19.48
Market cap.	US$3.43bn
Shares o/s	132m
Free float	100%
Avg. daily volume ('000)	319
Avg. daily value (US$m)	7.4

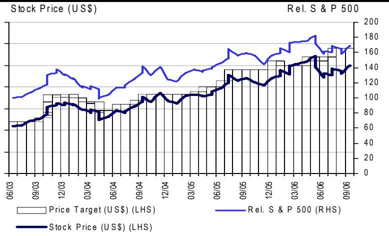
Balance sheet data 12/06E	
Shareholders' equity	US$1.35bn
P/BV (UBS)	2.5x
Net cash (debt)	(US$0.56bn)

Forecast returns	
Forecast price appreciation	+11.5%
Forecast dividend yield	0.4%
Forecast stock return	+11.9%
Market return assumption	9.0%
Forecast excess return	+2.9%

EPS (UBS, US$)

	12/06E		12/05
	UBS	Cons.	Actual
Q1	(0.37)	*(0.37)*	0.18
Q2	0.93	*0.93*	0.99
Q3E	0.34	*0.37*	0.54
Q4E	0.39	*0.41*	0.43
12/06E	1.30	*1.37*	
12/07E	2.07	*2.02*	

Performance (US$)



Source: UBS

www.ubs.com/investmentresearch

AECO and Argentina advantage

Agrium is one of the world's largest fertilizer producers and distributors, with low-cost gas . . .

Agrium is one of the world's largest fertilizer producers and distributors, marketing over 8 million tonnes of nutrients. It has nine nitrogen facilities strategically located in Canada, the US and Argentina. These locations have the competitive advantages of low cost gas (especially Argentina, Alaska and Alberta) and close proximity to key markets, which allows Agrium to capitalize on transportation advantages. The company also has two phosphate plants, which have a delivered cost advantage in the niche Western Canadian and Pacific Northwest markets. Agrium participates in the higher margin potash business through its Vanscoy operation in Saskatchewan. Finally, unlike many of its competitors, Agrium also has a two billion dollar plus retail division that offers wholesale products and crop protection services. The company operates over 500 retail centres in the US and South America.

One of the company's key challenges is sourcing long-term gas for its Kenai facility in Alaska. Currently the facility operates at about 50% of capacity based on contracts that have to be renegotiated annually. To achieve stability, the company is considering a coal gasification project to secure a long-term source for this plant. The company is also looking at possibly expanding its international nitrogen operations by participating in an Egyptian nitrogen plant that would have competitive gas costs.

. . . and a large retail division

While the company has been one of the most profitable nitrogen producers throughout the cycle, given its low-cost gas advantage and proximity to markets, Agrium has been diversifying its business out of nitrogen to create more stability in its earnings in hopes of obtaining a higher multiple. To this end, it recently bought Royster Clark to increase its retail business. Also, it made smaller acquisitions such as NuGro and Purcell, which produce higher-value agricultural products, and is increasing its potash capacity to 2.1 million tonnes.

Applying an 8.7x multiple to our 2007E CFPS estimate of $3.33, we derive a price target of $29. Given the implied return, we rate the shares Buy 2.

Table 12: Global fertilizer comparables

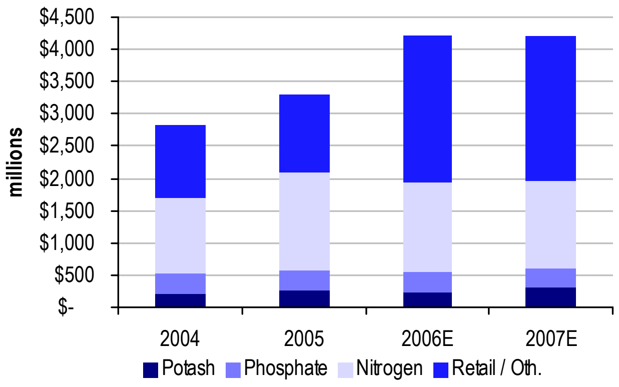
	EBITDA margin F2007E (%)	ROE F2007E (%)	Dividend yield F2007E (x)	Net debt to cap F2006 (%)	P/E F2007E (x)	P/CFPS F2007E (x)	EV/EBITDA F2007E (x)	Target P/CFPS F2007E (x)	Target EV/EBITDA F2007E (x)
Agrium Inc.	15.0	19.0	0.4	29.4	12.1	7.8	5.9	8.7	6.5
CF Industries	6.8	5.3	0.0	-18.4	22.8	7.5	6.0	7.9	6.4
Israel Chemicals	25.3	27.7	5.7	6.6	10.9	8.1	6.3	9.6	7.4
Mosaic	20.2	9.3	0.0	38.2	20.8	10.8	9.2	8.5	7.7
Potash	32.1	22.8	0.6	29.2	15.2	10.9	7.7	12.5	9.0
Yara	11.2	12.1	2.8	8.9	13.0	7.5	7.5	8.5	8.4
Group average	**18.4**	**16.0**	**1.6**	**15.6**	**15.8**	**8.8**	**7.1**	**9.3**	**7.6**

Source: UBS estimates

Company profile

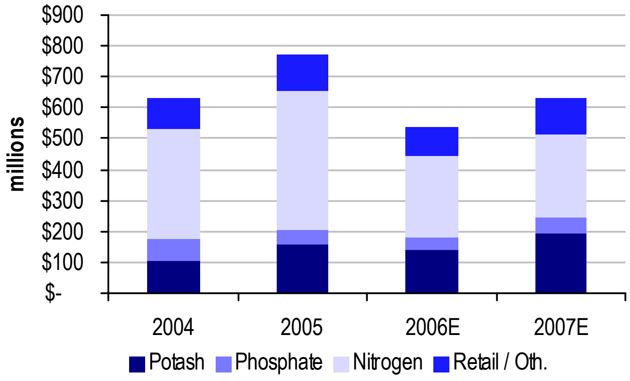
Agrium was originally created as Cominco Fertilizers from the spinout of the fertilizer division from Cominco Ltd. in 1993. The company subsequently merged with Viridian (Sherritt International's fertilizer assets) to create one of the largest North American nitrogen, phosphate and potash producers. Thereafter, through the acquisition of NuWest, it expanded its phosphate operations. Finally, through the acquisition of Crop Production Services (CPS), Western Farm Service (WFS) and most recently Royster Clark, it created one of North America's largest retail agricultural businesses. It also replicated this strategy in Argentina and Chile with over 30 retail outlets. Consequently, Agrium is now one of the largest fertilizer companies producing most nitrogen, phosphate and potash products, as well as offering retail agricultural services. Revenues and EBITDA by division are shown in Chart 51 and Chart 52.

Chart 51: Agrium—Revenue breakdown



Source: Company reports, UBS estimate

Chart 52: Agrium—EBITDA breakdown



Source: Company reports, UBS estimate

Nitrogen operations

The company's primary nitrogen facilities are located in Alberta, Canada and represent about 40% of capacity. These facilities have three major competitive advantages versus many of their North American competitors. First, their gas is based off AECO, which generally trades at a discount from Henry Hub. Historically, AECO gas prices have averaged more than $1.00/MMBtu less than Henry Hub. Second, many of the facilities are modern and therefore are more efficient consumers of natural gas. Finally, the plants are located in some of the highest priced markets, such as the Pacific Northwest and Western Canada. These markets have higher margins, all else being equal, given that they are the farthest from the main nitrogen importing region in the United States (New Orleans).

The company's primary nitrogen facilities are located in Alberta, Alaska, Texas, and Argentina

The company's only nitrogen facility in the higher-cost mainland US market is the Borger, Texas, ammonia facility; this plant is exposed to Henry Hub gas prices, but it only represents about 8% of the company's production. However, it does have the advantage of being on the Mapco pipeline, which leads to lower delivered costs.

Agrium's other two major nitrogen facilities are Kenai, Alaska, and Profertil, Argentina. These two facilities make sales that are more closely linked to NOLA prices, but they have much lower gas costs. At Kenai, we estimate gas costs of about \$4.50/MMBtu, while in Argentina Profertil receives gas for about \$1.50/MMBtu (through long-term contracts).

Table 13: Agrium—Nitrogen production capacity

(thousand tonnes)	Nitrogen
Borger, Texas	529
Carseland, Alberta	860
Ft. Saskatchewan, Alberta	650
Joffre, Alberta	480
Kenai, Alaska	1,555
Kennewick, Washington	390
Profertil, Argentina*	585
Redwater, Alberta	1,365
Standard/Granum, Alberta	120
West Sacramento, California	215
Total	6,749

*Represents 50% Profertil S.A. Source: Company reports

Phosphate operations

Phosphate operations serve niche markets

The phosphate operations are composed of the Redwater facility (which also produces nitrogen), which sources its rock from the wholly owned Kapuskasing, Ontario, mine. Reserves are sufficient for over 10 years of production, although we note in the past Redwater has imported rock from as far away as Africa. The company also produces phosphate at its Conda facility in Idaho. While these assets do not have the lowest costs, they benefit from selling into the niche Western US/Canadian markets.

Table 14: Agrium—Phosphate production capacity

(thousand tonnes)	Phosphate
Conda, Idaho	644
Redwater, Alberta	680
Total	1,324

Source: Company reports

Potash operations

Potash operation expanding

The potash operations are located in Saskatchewan and, like its much larger competitors Mosaic and PotashCorp, Agrium's potash mine has low costs and is estimated to have a very long life. While it is the smallest of the North American potash producers, it is currently expanding production from 1.8 to 2.1 million tonnes to take advantage of the favourable potash outlook.

Table 15: Agrium—Potash production capacity

(thousand tonnes)	Potash
Vanscoy, Saskatchewan	1,790

Source: Company reports

Distribution assets

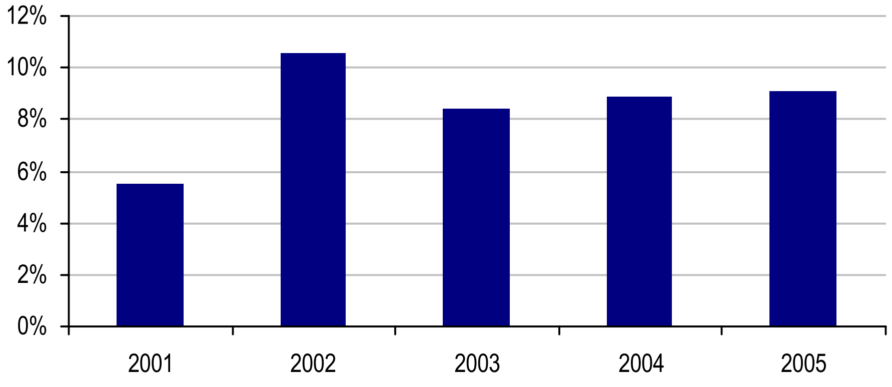
Distribution and storage is an integral part of Agrium's wholesale business. The company has over 1.5 million tonnes of dry and liquid storage and leases an additional 300,000 tonnes of warehouse space. Finally, the company has numerous ammonia spheres and operations with six different railways and over 300 trucking companies to ensure products are available to customers at the right time.

Retail operations

Agrium is one of the largest agricultural retailers in the Americas, with over $2 billion in sales

Agrium is one of the largest agricultural retailers in the Americas, with over $2 billion in sales from crop protection products, crop nutrients, seed and services. Average annual sales in the US agricultural retail market are estimated to exceed $27 billion. Given this fragmentation, Agrium has adopted a strategy of acquiring complementary retail businesses to create geographic diversity. Current sales are focused in the US, Argentina and Chile. While this business has lower margins, as shown in Chart 53, it generates consistent and growing profits and provides an outlet for wholesale products.

Chart 53: Agrium—Retail EBITDA margins



Source: Company reports

Table 16: Agrium—North America wholesale sensitivities

Wholesale margins	Change in Factor	EBIT Impact	Net Earnings Impact
Nitrogen	$10.00	49.0	30.9
Phosphate	$10.00	10.7	6.7
Potash	$10.00	16.1	10.1
Exchange rate from C$ to US$	$0.01	4.6	2.9

Source: Company reports

Table 17: Agrium—South America wholesale sensitivities

Wholesale margins	Change in Factor	EBIT Impact	Net Earnings Impact
Nitrogen	$10.00	6.0	3.8
Exchange rate from Argentine Peso to US$	0.3 Pesos	1.7	1.1

Source: Company reports

Key issues

- **Kenai gas**—When Agrium acquired the one million tonne urea and 590,000 tonne ammonia plant at Kenai, Alaska, from Unocal in 2000 it believed there was sufficient gas to support this plant through 2008/09. Given the stranded nature of the gas and firm demand for gas from other consumers, the company has been unable to secure the expected gas from Unocal and has been forced to operate the plant at about half capacity.

- **Excess cash**—Agrium is a well capitalized company (net debt to cap of 29.4%), with strong free cash flow prospects over coming years. The redeployment of this capital could have a material impact on shareholder returns.

- **Potential monetization of retail**—Agrium's retail business is a steady, consistent performer, with margins that have the potential to move higher going forward. We expect that at some point in the future, the company may choose to monetize these assets if the market does recognize their value.

Kenai gas

Gas supply at Kenai is an issue

When Agrium acquired the one million tonne urea and 590,000 tonne ammonia plant at Kenai, Alaska, from Unocal in 2000, it believed there was sufficient gas to support this plant through 2008/09. Given the stranded nature of the gas and firm demand in the region for gas, Unocal did not deliver enough gas and Agrium was unable to operate Kenai at capacity. Following a lengthy litigation, the company resolved its dispute with Unocal and now obtains gas on a yearly basis from numerous sources for about half the plant's capacity, albeit at higher gas prices than the original Unocal contract. Consequently, the company is now exploring other sources of long-term gas, including the Kenai Blue Sky Coal Gasification project that would create a long-term gas offtake opportunity for the nitrogen facility.

Excess cash

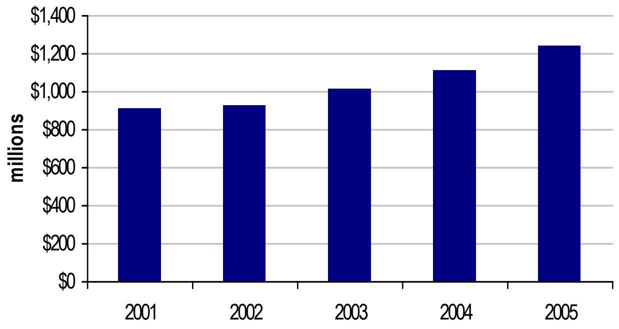
Excess cash to be used for wholesale and retail operations

The company currently has a net debt to total cap of 29.4%. We expect it to generate strong cash flow over the next few years. The company has historically used its excess cash flow to increase its fertilizer assets, but it has also completed several share buybacks for over 25% of the stock. We believe future cash flow will be used for further retail and/or wholesale acquisitions. On the wholesale side, the company is currently examining a new world scale nitrogen facility in Egypt. This facility would have capacity of about 1.2 million tonnes of urea and gas costs of $1.25/MMBtu. A decision is expected in 1Q07, and we expect the company to own 50-65%. In retail, we would not be surprised to see further acquisitions to grow this business given the fragmented nature of the retail Ag market.

Potential monetization of retail

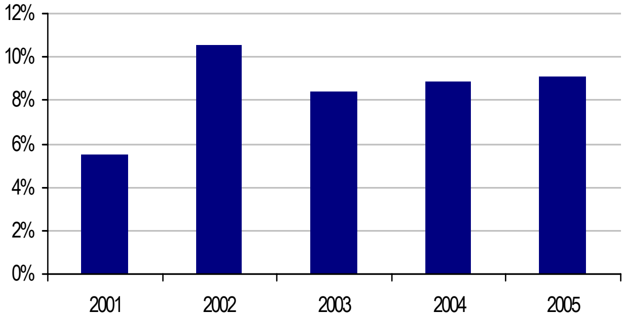
As shown in Chart 54 and Chart 55, the retail operations provide a steady, albeit lower-margin, business. However, through rationalization and effective incentive programs, the company has improved the margins of the business to 9-10%, which is much higher than its competitors. The company recently acquired Royster Clark, which had margins of only 5-6%, and the company expects to improve these margins to the 7-8% range over the next few years. Given the steady nature of this business and our belief that the market does not fully recognize the value, it is possible that these assets could be monetized at some time. However, we believe this is unlikely in the near term as we believe the company may make future acquisitions which would lead to a larger more liquid retail business which could be ultimately monetized.

Chart 54: Agrium—Retail revenues



Source: Company reports

Chart 55: Agrium—Retail EBITDA margins



Source: Company reports

Valuation

Given its mix of fertilizer and its lower-cost nitrogen operations, greater liquidity and greater diversification in wholesale and retail products, we believe Agrium should trade at a premium to CF Industries.

Applying an 8.7x multiple to our 2007 CFPS estimate of $3.33, we derive a price target of $29. Given the implied return, we rate the shares Neutral 2. Our predictability rating of 2 reflects the volatile nature of fertilizer company earnings.

Table 18: Global fertilizer comparables

	EBITDA margin F2007E (%)	ROE F2007E (%)	Dividend yield F2007E (x)	Net debt to cap F2006 (%)	P/E F2007E (x)	P/CFPS F2007E (x)	EV/EBITDA F2007E (x)	Target P/CFPS F2007E (x)	Target EV/EBITDA F2007E (x)
Agrium Inc.	15.0	19.0	0.4	29.4	12.1	7.8	5.9	8.7	6.5
CF Industries	6.8	5.3	0.0	-18.4	22.8	7.5	6.0	7.9	6.4
Israel Chemicals	25.3	27.7	5.7	6.6	10.9	8.1	6.3	9.6	7.4
Mosaic	20.2	9.3	0.0	38.2	20.8	10.8	9.2	8.5	7.7
PotashCorp	32.1	22.8	0.6	29.2	15.2	10.9	7.7	12.5	9.0
Yara	11.2	12.1	2.8	8.9	13.0	7.5	7.5	8.5	8.4
Group average	**18.4**	**16.0**	**1.6**	**15.6**	**15.8**	**8.8**	**7.1**	**9.3**	**7.6**

Source: Reuters, UBS estimates

Agrium Inc.

Income statement (US$m)	12/01	12/02	12/03	12/04	12/05	12/06E	% ch	12/07E	% ch	12/08E	% ch
Revenue	-	2,083	2,499	2,838	3,294	4,206	27.7	4,219	0.3	-	
Operating expenses (ex depn)	-	(1,871)	(2,339)	(2,215)	(2,648)	(3,670)	38.6	(3,586)	-2.3	-	
EBITDA (UBS)	-	212	160	623	646	536	-17.0	634	18.1	-	
Depreciation	-	(148)	(140)	(156)	(146)	(163)	11.3	(155)	-4.9	-	
Operating income (EBIT, UBS)	-	64	21	467	500	374	-25.2	479	28.2	-	
Other income and associates	-	0	0	0	0	(57)		4		-	
Net interest	-	(68)	(63)	(55)	(49)	(59)	19.9	(47)	-19.7	-	
Abnormal items (pre-tax)	-	0	0	0	0	0		0		-	
Profit before tax	-	(4)	(42)	412	451	258	-42.8	436	68.8	-	
Tax	-	4	21	(136)	(168)	(69)	-58.7	(153)	121.3	-	
Profit after tax	-	(0)	(21)	276	283	189	-33.3	282	49.5	-	
Abnormal items (after tax)	-	0	0	0	0	0		0		-	
Minorities / pref dividends	0	(11)	(11)	(9)	0	0		0		0	
Net income (local GAAP)	-	(11)	(32)	267	283	189	-33.3	282	49.5	-	
Net income (UBS)	-	(11)	103	215	283	171	-39.7	282	65.3	-	
Tax rate (%)	-	-	-	33	37	27	-27.8	35	31.1	-	
Pre-abnormal tax rate (%)	-	-	-	33	37	27	-27.8	35	31.1	-	

Per share (US$)	12/01	12/02	12/03	12/04	12/05	12/06E	% ch	12/07E	% ch	12/08E	% ch
EPS (local GAAP)	-	(0.06)	(0.22)	1.91	2.12	1.44	-31.9	2.07	43.9	-	
EPS (UBS)	-	(0.06)	0.76	1.55	2.12	1.30	-38.4	2.07	59.0	-	
Net DPS	-	0.11	0.11	0.11	0.11	0.11	0.0	0.11	0.0	0.11	0.0
Cash EPS	-	1.11	1.92	2.83	3.25	2.54	-21.7	3.33	31.0	-	
BVPS	-	6.05	6.51	8.60	9.01	10.34	14.8	12.38	19.8	-	

Balance sheet (US$m)	12/01	12/02	12/03	12/04	12/05	12/06E	% ch	12/07E	% ch	12/08E	% ch
Cash and equivalents	-	109	200	425	300	149	-50.4	408	174.2	-	
Other current assets	-	575	742	891	1,067	1,067	0.0	1,067	0.0	-	
Total current assets	-	684	942	1,316	1,367	1,216	-11.0	1,475	21.3	-	
Net tangible fixed assets	-	1,400	1,260	1,239	1,293	1,827	41.3	1,814	-0.7	-	
Net intangible fixed assets	-	0	0	0	0	0		0		-	
Investments / other assets	0	85	71	101	125	125	0.0	125	0.0	0	
Total assets	-	2,169	2,273	2,656	2,785	3,168	13.8	3,414	7.8	-	
Trade payables and other ST liabilities	0	340	404	472	576	576	0.0	576	0.0	0	
Short term debt	-	26	121	60	35	35	0.0	35	0.0	-	
Total current liabilities	-	366	525	532	611	611	0.0	611	0.0	-	
Long term debt	-	736	614	540	442	678	53.3	624	-7.9	-	
Other long term liabilities	-	301	311	456	550	523	-4.9	554	6.0	-	
Total liabilities	-	1,403	1,450	1,528	1,603	1,811	13.0	1,790	-1.2	-	
Equity & minority interests	-	767	824	1,128	1,182	1,357	14.7	1,624	19.7	-	
Total liabilities & equity	-	2,169	2,273	2,656	2,785	3,168	13.8	3,414	7.8	-	

Cash flow (US$m)	12/01	12/02	12/03	12/04	12/05	12/06E	% ch	12/07E	% ch	12/08E	% ch
Net income	-	(0)	(21)	276	283	189	-33.3	282	49.5	-	
Depreciation	-	148	140	156	146	163	11.3	155	-4.9	-	
Net change in working capital	-	54	(114)	(8)	(51)	0		0		-	
Other (operating)	-	22	185	25	72	(27)		32		-	
Net cash from operations	-	224	189	449	450	324	-27.9	468	44.4	-	
Capital expenditure	-	(52)	(99)	(96)	(197)	(207)	4.8	(142)	-31.5	-	
Net acquisitions / disposals	-	23	12	10	13	(490)		0		-	
Other changes in investments	-	0	36	7	(28)	0		0		-	
Cash from investing activities	-	(29)	(51)	(79)	(212)	(697)	228.5	(142)	-79.7	-	
Increase/(decrease) in debt	-	(220)	(28)	(143)	(301)	236		(53)		-	
Share issues / (repurchases)	-	108	6	12	(48)	0		0		-	
Dividends paid	-	(14)	(14)	(14)	(14)	(14)	2.9	(14)	0.0	-	
Other cash from financing	-	0	0	0	0	0		0		-	
Cash from financing activities	-	(137)	(47)	(145)	(363)	221		(68)		-	
Cash flow chge in cash & equivalents	-	58	91	225	(125)	(151)	20.7	259		-	
FX / non cash items	-	-	0	0	0	0		0		-	
Bal sheet chge in cash & equivalents	-	-	91	225	(125)	(151)	20.7	259		-	
Core EBITDA	-	212	160	623	646	536	-17.0	634	18.1	-	
Maintenance capital expenditure	-	(48)	(95)	(92)	(95)	(82)	-13.7	(82)	0.0	-	
Maintenance net working capital	-	0	0	0	0	0		0		-	
Operating free cash flow, pre-tax	-	164	66	532	551	454	-17.6	552	21.4	-	

Source: Company accounts, Thomson Financial, UBS estimates. (UBS) valuations are stated before goodwill, exceptionals and other special items. Note: For some companies, the data represents an extract of the full company accounts.

Global Equity Research

Americas

Chemicals, Specialty

Rating **Buy 2**

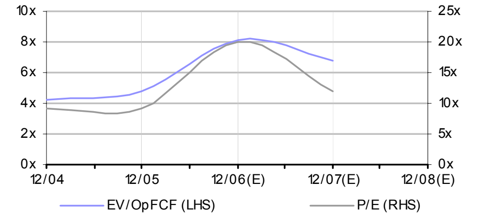
Price target **US$29.00**

Agrium Inc.

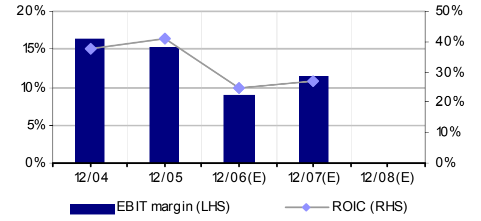
Company Profile

Agrium is a major North American fertilizer producer with nine nitrogen plants, two phosphate plants, and one potash mine. It is the largest North American nitrogen producer and owns three of the most modern plants, resulting in lower gas consumption. Their efficiency and favourable location in Alberta, where gas costs are typically lower than those of competitors, gives Agrium some of the world's lowest-cost ammonia and urea plants. A large portion of Agrium's sales are in the higher-priced U.S. Pacific Northwest and western Canadian markets leading to even better margins.

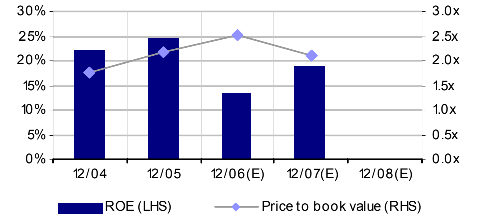
Value (EV/OpFCF & P/E)



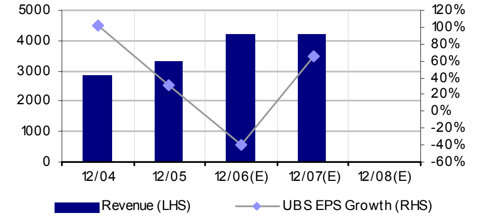
Profitability



ROE v Price to book value



Growth (UBS EPS)



Valuation (x)	**5Yr Avg**	**12/04**	**12/05**	**12/06E**	**12/07E**	**12/08E**
P/E (local GAAP)	-	7.9	9.3	18.1	12.5	-
P/E (UBS)	-	9.8	9.3	19.9	12.5	-
P/CEPS	-	5.3	6.0	10.2	7.8	-
Net dividend yield (%)	-	0.7	0.6	0.4	0.4	0.4
P/BV	-	1.8	2.2	2.5	2.1	-
EV/revenue (core)	-	0.8	0.8	0.9	0.9	-
EV/EBITDA (core)	-	3.6	4.1	6.9	5.9	-
EV/EBIT (core)	-	4.8	5.2	9.8	7.8	-
EV/OpFCF (core)	-	4.2	4.8	8.1	6.7	-
EV/op. invested capital	-	1.8	2.2	2.4	2.1	-

Enterprise value (US$m)	**12/04**	**12/05**	**12/06E**	**12/07E**	**12/08E**
Average market cap	1,962	2,571	3,433	3,433	3,433
+ minority interests	3	3	3	3	-
+ average net debt (cash)	355	176	371	408	-
+ pension obligations and other	0	0	0	0	-
- non-core asset value	(101)	(125)	(125)	(125)	-
Core enterprise value	2,219	2,625	3,682	3,719	-

Growth (%)	**5Yr Avg**	**12/04**	**12/05**	**12/06E**	**12/07E**	**12/08E**
Revenue	-	13.6	16.1	27.7	0.3	-
EBITDA (UBS)	-	NM	3.7	-17.0	18.1	-
EBIT (UBS)	-	NM	7.1	-25.2	28.2	-
EPS (UBS)	-	101.1	30.6	-39.2	65.3	-
Cash EPS	-	47.4	14.8	-21.7	31.0	-
DPS Net	-	0.0	0.0	0.0	0.0	0.0
BVPS	-	32.1	4.8	14.8	19.8	-

Margins (%)	**5Yr Avg**	**12/04**	**12/05**	**12/06E**	**12/07E**	**12/08E**
EBITDA / revenue	-	22.0	19.6	12.8	15.0	-
EBIT / revenue	-	16.5	15.2	8.9	11.4	-
Net profit (UBS) / revenue	-	7.6	8.6	4.1	6.7	-
Return on capital (%)						
EBIT ROIC (UBS)	-	37.5	41.0	24.7	27.0	-
ROIC post tax	-	25.1	25.7	18.0	17.5	-
Net ROE	-	22.1	24.5	13.5	19.0	-
Coverage ratios (x)						
EBIT / net interest	-	8.5	10.2	6.5	10.2	-
Dividend cover (UBS EPS)	-	14.9	19.5	11.8	19.6	-
Div. payout ratio (%, UBS EPS)	-	6.7	5.1	8.4	5.1	-
Net debt / EBITDA	-	0.3	0.3	1.1	0.4	-
Efficiency ratios (x)						
Revenue / op. invested capital	-	2.3	2.7	2.8	2.4	-
Revenue / fixed assets	-	2.3	2.6	2.7	2.3	-
Revenue / net working capital	-	7.5	7.2	8.6	8.6	-
Investment ratios (x)						
OpFCF / EBIT	-	1.1	1.1	1.2	1.2	-
Capex / revenue (%)	-	3.4	6.0	4.9	3.4	-
Capex / depreciation	-	0.6	1.3	1.3	0.9	-
Capital structure (%)						
Net debt / total equity	-	15.5	15.0	41.6	15.5	-
Net debt / (net debt + equity)	-	13.5	13.1	29.4	13.4	-
Net debt (core) / EV	-	15.3	6.4	9.7	10.6	-

Source: Company accounts, Thomson Financial, UBS estimates. (UBS) valuations are stated before goodwill, exceptionals and other special items. Valuations: based on an average share price that year, (E): based on a share price of US$26.01 on 20 Sep 2006 19:35 EDT; Market cap (E) may include forecast share issues/buybacks.

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Americas

Chemicals, Specialty

CF Industries Holdings, Inc.

The “best house in a bad neighbourhood”

Donaldsonville is CF’s crown jewel

CF Industries has amongst the largest, lowest-cost nitrogen fertilizer facilities in both the United States and Canada. The company’s Donaldsonville facility in Louisiana is the largest nitrogen-based fertilizer plant in North America, giving the facility significant scale advantages vs. its North American peers.

Rising USGC natural gas costs remain a threat

Unfortunately, CF and other ammonia/urea/UAN producers are competing in a global market with plants that have access to natural gas feedstocks at a fraction of the cost prevalent in the US gulf coast. While Donaldsonville is an impressive asset with scale and distribution advantages, we view it as the ‘best house in a bad neighbourhood’—an unfortunate situation in real estate and fertilizer production.

Value creation opportunities via pet coke and Trinidad

CF has strategic opportunities for value creation. Our analysis indicates that a pet coke project at Donaldsonville could offer an IRR of 17% based on a $5/MMBtu gas assumption. The company’s plans for a new greenfield UAN plant in Trinidad could offer a solid return, provided capital costs are contained.

Valuation: Fairly valued

We initiate coverage of CF Industries with a Neutral 2 rating and a 12 month target price of $18.00 based on 7.9x our 2007E CFPS multiple. While the stock trades at a discount to global peers, we believe this discount is warranted given the company’s smaller size, lower margins and dependence on USGC gas as a feedstock at Donaldsonville.

Highlights (US$m)	12/04	12/05	12/06E	12/07E	12/08E
Revenues	-	1,908	1,914	2,011	1,888
EBIT (UBS)	-	136	76	53	58
Net income (UBS)	-	(28)	38	41	43
EPS (UBS, US$)	-	(0.51)	0.70	0.74	0.79
Net DPS (UBS, US$)	-	0.00	0.00	0.00	0.00

Profitability & Valuation	5-yr hist. av.	12/05	12/06E	12/07E	12/08E
EBIT margin %	-	7.1	4.0	2.7	3.0
ROIC (EBIT) %	-	-	11.2	8.0	8.8
EV/EBITDA x	-	3.3	5.3	6.0	5.4
PE (UBS) x	-	-29.2	24.2	22.8	21.5
Net dividend yield %	-	0.0	0.0	0.0	0.0

Source: Company accounts, Thomson Financial, UBS estimates. (UBS) valuations are stated before goodwill, exceptionals and other special items.

Valuations: based on an average share price that year, (E): based on a share price of US$16.95 on 20 Sep 2006 17:55 EDT

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Rating	**Neutral 2** *Prior: Not Rated*
Price target	**US$18.00** *Prior: Not Rated*
Price	**US$16.95**

RIC: CF.N BBG: CF US

Trading data	
52-wk. range	US$18.75-11.30
Market cap.	US$0.93bn
Shares o/s	55.0m
Free float	100%
Avg. daily volume ('000)	270
Avg. daily value (US$m)	4.1

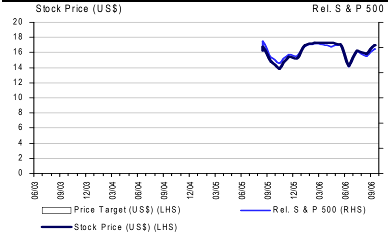
Balance sheet data 12/06E	
Shareholders' equity	US$0.76bn
P/BV (UBS)	1.2x
Net cash (debt)	US$0.12bn

Forecast returns	
Forecast price appreciation	+6.2%
Forecast dividend yield	0.0%
Forecast stock return	+6.2%
Market return assumption	9.9%
Forecast excess return	-3.7%

EPS (UBS, US$)

	12/06E			12/05
	From	To	Cons.	Actual
Q1	-	(0.45)	*(0.45)*	-
Q2	-	0.77	*0.77*	-
Q3E	-	0.21	*0.21*	(1.52)
Q4E	-	0.17	*0.28*	(0.18)
12/06E	-	0.70	*0.82*	
12/07E	-	0.74	*0.80*	

Performance (US$)



Source: UBS

www.ubs.com/investmentresearch

The best house in a bad neighbourhood

CF's key asset in Donaldsonville has scale and distribution advantages, but suffers due to high USGC gas costs

CF Industries has amongst the largest, lowest-cost nitrogen fertilizer facilities in both the United States and Canada. The company's Donaldsonville facility in Louisiana is the largest nitrogen-based fertilizer plant in North America, giving the company significant scale advantage compared with its North American peers. Unfortunately, CF and other ammonia/urea/UAN (urea ammonium nitrate) producers are competing in a global market with plants that have access to natural gas feedstocks at a fraction of the cost prevalent in the US gulf coast. While Donaldsonville is an impressive asset with scale and distribution advantages, we view it as the 'best house in a bad neighbourhood'—an unfortunate situation in real estate and fertilizer production.

In our view, the company's most attractive strategic opportunity is to switch to pet coke as a feedstock at Donaldsonville

Notwithstanding the location issues facing Donaldsonville, the company does have options available to it in order to create shareholder value. CF management is actively studying the potential of weaning Donaldsonville off natural gas as a feedstock by moving forward with a petroleum coke project at the site. A pet coke project at Donaldsonville would represent a significant bet by management that natural gas in North America was likely to stay stronger for longer. A move in this direction could dramatically alter the company's cost base and capital structure (a pet coke line at Donaldsonville could cost approximately $1 billion). Given our expectation of continued feedstock disadvantages for US gulf coast nitrogen fertilizer producers, we do not find the CF story particularly compelling at current levels.

We rate CF industries Neutral 2 with a 12-month target price of $18. While the stock trades at a discount from its global fertilizer peers, we believe this discount is warranted by the company's smaller size, lower margins and dependence on USGC gas as a feedstock at Donaldsonville.

Table 19: Global fertilizer comparables

	EBITDA margin F2007E (%)	ROE F2007E (%)	Dividend yield F2007E (x)	Net debt to cap F2006 (%)	P/E F2007E (x)	P/CFPS F2007E (x)	EV/EBITDA F2007E (x)	Target P/CFPS F2007E (x)	Target EV/EBITDA F2007E (x)
Agrium Inc.	15.0	19.0	0.4	29.4	12.1	7.8	5.9	8.7	6.5
CF Industries	6.8	5.3	0.0	-18.4	22.8	7.5	6.0	7.9	6.4
Israel Chemicals	25.3	27.7	5.7	6.6	10.9	8.1	6.3	9.6	7.4
Mosaic	20.2	9.3	0.0	38.2	20.8	10.8	9.2	8.5	7.7
Potash Corporation	32.1	22.8	0.6	29.2	15.2	10.9	7.7	12.5	9.0
Yara	11.2	12.1	2.8	8.9	13.0	7.5	7.5	8.5	8.4
Group average	**18.4**	**16.0**	**1.6**	**15.6**	**15.8**	**8.8**	**7.1**	**9.3**	**7.6**

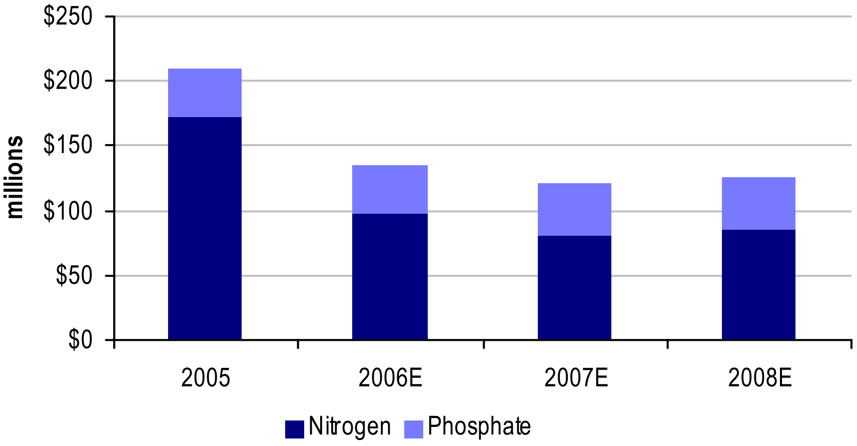
Source: UBS estimates

Company profile

CF is focused on nitrogen fertilizer

With 2005 sales of $1.9 billion, CF Industries (CF) is the third largest producer and distributor of nitrogen fertilizer products in North America. The company operates two business segments: the nitrogen fertilizer business and the phosphate business. The nitrogen segment produces various products, including ammonia, urea and urea ammonium nitrate (UAN). The phosphate segment produces diammonium phosphate (DAP) and monoammonium phosphate (MAP).

Chart 56: CF Industries—EBIT contribution



Source: Company reports, UBS estimates

CF was founded in 1946 as a cooperative

The company was founded in 1946 as a fertilizer brokerage and gradually expanded into distribution and production. In 2003, the company decided to restructure from a cooperative business model to a new business model that establishes financial performance as its principal objective. Prior to 2002, the company's focus was on providing its owners with an assured supply of fertilizer and over 80% of annual sales were to the cooperative owners.

The company's primary nitrogen facilities are located in Donaldsonville, Louisiana and Medicine Hat, Alberta

The company's primary nitrogen facilities are located in Donaldsonville, Louisiana and Medicine Hat, Alberta. The Donaldsonville facility is the largest nitrogen manufacturing facility in North America, with the capacity to produce 2.3 million tons of ammonia, 2.6 million tons of urea and 2.7 million tons of UAN all on an annual basis. CF also operates and owns a 66% interest in the largest nitrogen complex in Canada, with an annual capacity of 1.3 million tons of ammonia and 810,000 tons of urea. The Medicine Hat facility also has access to cheaper natural gas prices at the AECO hub. Historically, natural gas prices at AECO have averaged greater than $1.00/MMBtu less than prices at Henry Hub.

Table 20: CF Industries—Nitrogen capacity

Facility	Product	Annual Capacity (thousand tons)
Donaldsonville	Ammonia	2280
	Granular urea	1730
	UAN (28%)	2710
	Total	6720
Medicine Hat	Ammonia	1250
	Granular urea	810
	Total	2060

Source: Company reports

CF's phosphate operations are in Florida

The phosphate segment is composed of one of the largest integrated ammonium phosphate complexes in the US (Plant City, Florida) and a phosphate rock mine located in Hardee County, Florida. The Plant City facility has the capacity to produce over two million tons of ammonium phosphate fertilizers (DAP and MAP) on a yearly basis, while the rock mine has reserves that will supply the Plant City facility for 17 years at current operating rates. CF has also applied for authorization to expand the mine, which the company estimates will add an additional 10 years.

Table 21: CF Industries—Phosphate capacity and reserve life

Hardee Phosphate Rock Mine	Annual Capacity (thousand tons)	Proven & Probable Reserves	Recoverable tons (thousands)
Phosphate rock	3500	Permitted	59846
Plant City Phosphate Fertilizer Complex		Pending Permit	35230
Sulfuric acid	2640	Total	95076
Phosphoric acid as P2O5	1000		
DAP/MAP	2040		

Source: Company reports

CF has significant distribution assets, with a focus on the US Midwest

Along with the phosphate mine and nitrogen assets, CF Industries operates an extensive distribution system. The distribution assets consist of 48 facilities, including 20 ammonia terminals, 21 UAN terminals and seven dry product warehouses. The facilities are primarily located in the major grain-producing areas of the Midwestern US, which typically account for 40% to 50% of fertilizer used by commercial farmers.

Table 22: CF Industries—Cash sensitivities

	Cash impact per share
$10/ton change in ammonia	**0.12**
$10/ton change in ammonia on cash margins	0.19
$10/ton change in urea	0.33
$10/ton change in UAN	0.49
$10/ton change in DAP/MAP	0.38
$10/tonne change in sulfur	0.15
$0.1/MMbtu change-Henry Hub	0.15
$0.1/Mmbtu change-Aeco	0.05

Source: Company reports

Key issues

- **Pet coke potential**—The potential exists for Donaldsonville to dramatically alter its cost structure by weaning itself off natural gas as a feedstock in favour of a pet coke system. Our analysis indicates that a pet coke project at Donaldsonville could offer an IRR of 17% at a USGC gas price of $5.00/mcf, and even higher assuming tighter energy markets.

- **Trinidad UAN project**—CF has been studying the potential of building a greenfield nitrogen fertilizer plant (UAN) in Trinidad with two joint venture partners. While greenfield cost estimates for this project have increased materially, the relocation of an existing facility could allow CF and its partners to extract value from the attractive gas contract struck in Trinidad.

- **Forward pricing program**—CF employs a forward pricing program, whereby it buys gas in the forward market in order to lock in margins on ammonia/urea/UAN sales contracts with fixed pricing. This program reduces the risk of a margin squeeze in the event of rising gas prices. A by-product of this strategy, however, is significant hedging gains/losses, which can make quarterly earnings difficult to forecast.

- **Excess cash**—CF is an underlevered business with $224 million of net cash and short-term investments on the balance sheet as of June 30. In our view, this gives the company the flexibility to move forward with a pet coke project at Donaldsonville and/or a UAN plant in Trinidad.

Pet coke potential

Donaldsonville has many strengths and one glaring weakness: feedstock costs

Donaldsonville has many strengths (scale, distribution system, deepwater port access, etc.) and one glaring weakness: feedstock costs. Given Donaldsonville's location in Louisiana, the plant pays prevailing US Gulf Coast natural gas prices, which are amongst the highest in the world. Given that natural gas accounts for approximately 90% of ammonia production costs at a typical world scale facility, a feedstock cost disadvantage can dwarf other factors in evaluating the value of a nitrogen fertilizer plant.

By switching to a petroleum coke process, Donaldsonville could improve its cost position dramatically

The potential exists for Donaldsonville to dramatically alter its cost structure by weaning itself off natural gas as a feedstock in favour of a petroleum coke (pet coke) system. Pet coke is a byproduct of the petroleum refinery process that can be used to produce large quantities of hydrogen, nitrogen and carbon dioxide. In turn, hydrogen and nitrogen can be used (instead of natural gas) to produce ammonia, while carbon dioxide can be used to upgrade ammonia to urea and UAN.

CF is actively exploring the potential of implementing such a process, which could allow it to significantly reduce and potentially eliminate its Donaldsonville facility's need to consume natural gas. A pet coke project would require significant capital (perhaps $800 million to a billion dollars to cut

Donaldsonville's gas consumption in half) and a construction period of three-plus years. Our simplified analysis, outlined in Table 23, suggests that such a project could offer a very attractive return based on a long-term USGC gas price assumption of $5.00/mcf.

Table 23: Pet coke economics at Donaldsonville

Assumed pet coke capital cost	$1,000,000,000
Assumed USGC gas price ($/mcf)	$ 5.00
Assumed pet coke cost per tonne	$ 25.00
Discount rate	10.0%
Gas consumption (mcf) at two ammonia plants	42,000,000
Annual value of gas consumption	$ 210,000,000
Annual cost of running PET coke	$ 32,812,500
Annual savings of pet coke vs. natural gas	$ 177,187,500
PV of gas consumption (20 years)	$ 1,787,848,381
PV of pet coke operating cost (20 years)	$ 279,351,310
PV of PET coke project at 10% discount rate	$ 508,497,072
Project payback (years)	**5.6**
IRR	**17.0%**

Source: Company reports, UBS estimates

CF may contract a third party to construct and operate the pet coke project

We note that the above analysis is one scenario of many that could play out in the event the company does move forward with a pet coke project. Another alternative could see CF contract a third party to build and operate a pet coke line, with CF agreeing to purchase the plant's output. This could result in CF putting up little or no capital, but would result in less operating cost savings compared with natural gas, as the price paid for the nitrogen and oxygen outputs would need to allow for a return to the operator of the pet coke line.

Trinidad nitrogen project

CF has been studying the potential of building a greenfield nitrogen fertilizer plant in Trinidad

CF Industries has been studying the potential of building a greenfield nitrogen fertilizer plant (UAN) in Trinidad with two joint venture partners (ANSA McAL Limited and Terra Industries). The joint venture partners have secured a gas supply agreement that would provide natural gas at a cost of less than $2.00/MMBtu, with this price increasing as ammonia prices rise (to a maximum of perhaps $3.00 in a very strong ammonia price environment). While this facility is in the planning phase only, industry contacts indicate that the JV partners are looking at a facility with a capacity of approximately 680,000 tonnes per year (i.e., a world-scale facility, 2,000 tonne per day plant).

Capital costs may make a greenfield project in Trinidad prohibitively expensive

CF management disclosed on its 2Q06 conference call that it was "taking a step back" from the Trinidad project due to escalating capital costs. Capital cost estimates for Trinidad that were once in the $500-700 million range have escalated to beyond $800 million, a sum that CF and its partners believe would prevent them from earning an acceptable return on the project. Capital cost escalation for petrochemical projects is not a new phenomenon. Engineering talent, procurement services, steel and skilled labour are all in short supply in the petrochemical world.

Relocating an existing plant is an interesting alternative to greenfield

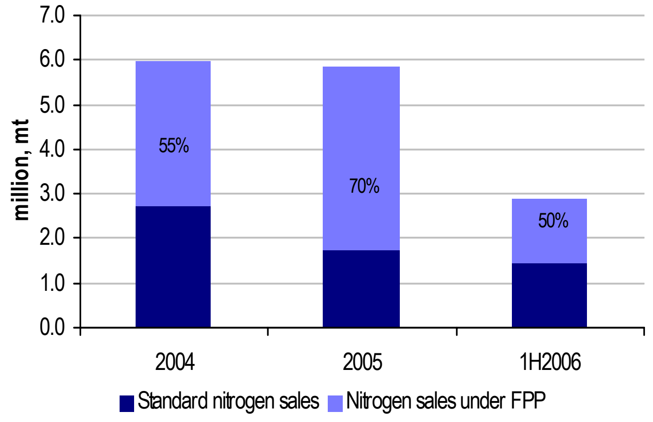
Given rising costs and comments from the JV partners over recent months, it seems unlikely this project will move forward as a conventional greenfield plant. There are, however, a number of idled nitrogen fertilizer plants around the world that could be candidates for relocation to Trinidad. As a rule of thumb, the transport and relocation of a plant results in costs roughly 60% that of greenfield. Fertilizer plants, however, are not Ikea furniture—they are not designed as mobile facilities. Relocation likely involves greater risk than the greenfield route.

Forward pricing program

CF employs a forward pricing program that is designed to stabilize operating margins

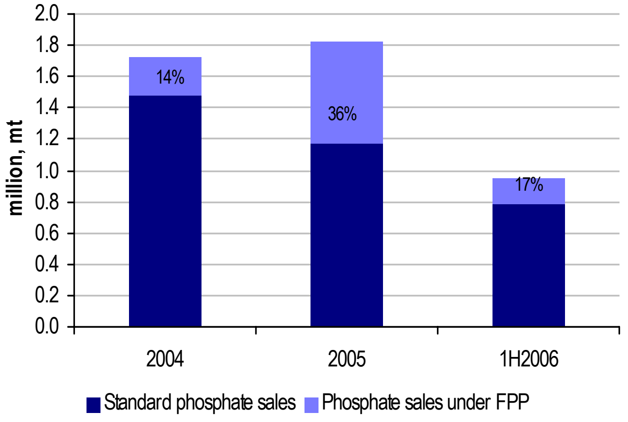
CF employs a forward pricing program (FPP) that is designed to stabilize operating margins by locking in fertilizer prices for customer shipments along with a fixed natural gas price. Often customer orders are placed well in advance of shipment schedules, which allows the company to quote an appropriate nitrogen price while locking in the cost of natural gas through various hedging techniques. Chart 57 shows the portion of nitrogen fertilizer sales that have taken place under the FPP over recent years.

Chart 57: CF Industries—Nitrogen sales under FPP



Source: Company reports

Chart 58: CF Industries—Phosphate sales under FPP



Source: Company reports

We expect that forecasting accurate quarterly earnings estimates for CF will be challenging given the significant impact the FPP can have on the timing of earnings. We also note that management has the flexibility to deliver manufactured or purchased fertilizer on a quarterly basis, which further complicates the process of forecasting earnings.

The forward pricing program makes quarterly estimates for CF more art than science

Balance sheet options

CF is an underlevered business with over $200 million of net cash on the balance sheet as of June 30. Given the volatile nature of the company's end markets (and its input costs), we believe that a low debt level is likely to be a facet of the business for the foreseeable future. In our view, however, the company does have the ability to add some modest level of leverage if it chooses to move forward with a pet coke project at Donaldsonville and/or a UAN plant in Trinidad.

CF is an underlevered business with over $200 million of net cash on hand

Valuation

CF Industries is close to fairly valued, in our view. The shares trade at a 2007E P/CFPS of 7.5x, at the low end of our global fertilizer coverage universe. We believe, however, that a lower multiple is warranted for CF given:

- the company's market capitalization (less than one billion and vs. a peer group average of over $5 billion);
- EBITDA margins and return on equity well below global peers; and,
- the company's leverage to high-cost USGC natural gas feedstock at Donaldsonville.

Our target price of $18 is based on a 6.4x multiple of 2007E EBITDA and 7.9x 2007E CFPS, the lowest target multiples in our global fertilizer coverage universe. We rate the shares Neutral 2. Our predictability rating of 2 reflects our view that the fertilizer industry is inherently volatile and therefore earnings/profitability are difficult to predict.

Table 24: Global fertilizer comparables

	EBITDA margin F2007E (%)	ROE F2007E (%)	Dividend yield F2007E (x)	Net debt to cap F2006 (%)	P/E F2007E (x)	P/CFPS F2007E (x)	EV/EBITDA F2007E (x)	Target P/CFPS F2007E (x)	Target EV/EBITDA F2007E (x)
Agrium Inc.	15.0	19.0	0.4	29.4	12.1	7.8	5.9	8.7	6.5
CF Industries	6.8	5.3	0.0	-18.4	22.8	7.5	6.0	7.9	6.4
Israel Chemicals	25.3	27.7	5.7	6.6	10.9	8.1	6.3	9.6	7.4
Mosaic	20.2	9.3	0.0	38.2	20.8	10.8	9.2	8.5	7.7
Potash Corporation	32.1	22.8	0.6	29.2	15.2	10.9	7.7	12.5	9.0
Yara	11.2	12.1	2.8	8.9	13.0	7.5	7.5	8.5	8.4
Group average	**18.4**	**16.0**	**1.6**	**15.6**	**15.8**	**8.8**	**7.1**	**9.3**	**7.6**

Source: UBS estimates

CF Industries Holdings, Inc.

Income statement (US$m)	**12/01**	**12/02**	**12/03**	**12/04**	**12/05**	**12/06E**	***% ch***	**12/07E**	***% ch***	**12/08E**	***% ch***
Revenue	**-**	**-**	**-**	**-**	**1,908**	**1,914**	***0.3***	**2,011**	***5.1***	**1,888**	***-6.1***
Operating expenses (ex depn)	-	-	-	-	(1,675)	(1,749)	*4.4*	(1,874)	*7.1*	(1,747)	*-6.8*
EBITDA (UBS)	**-**	**-**	**-**	**-**	**233**	**165**	***-29.2***	**137**	***-16.8***	**142**	***3.1***
Depreciation	-	-	-	-	(98)	(89)	*-8.3*	(84)	*-6.0*	(84)	*0.0*
Operating income (EBIT, UBS)	**-**	**-**	**-**	**-**	**136**	**76**	***-44.2***	**53**	***-29.6***	**58**	***7.9***
Other income and associates	-	-	-	-	(44)	(22)	*-49.8*	0		0	
Net interest	-	-	-	-	1	9	*1461.*	14	*44.9*	14	*0.0*
Abnormal items (pre-tax)	-	-	-	-	0	0		0		0	
Profit before tax	**-**	**-**	**-**	**-**	**93**	**63**	***-31.8***	**67**	***6.2***	**71**	***6.3***
Tax	-	-	-	-	(129)	(25)	*-80.9*	(26)	*6.2*	(28)	*6.3*
Profit after tax	**-**	**-**	**-**	**-**	**(36)**	**38**		**41**	***6.2***	**43**	***6.3***
Abnormal items (after tax)	-	-	-	-	(3)	0		0		0	
Minorities / pref dividends	0	0	0	0	0	0		0		0	
Net income (local GAAP)	**-**	**-**	**-**	**-**	**(39)**	**38**		**41**	***6.2***	**43**	***6.3***
Net income (UBS)	**-**	**-**	**-**	**-**	**(28)**	**38**		**41**	***6.2***	**43**	***6.3***
Tax rate (%)	-	-	-	-	*139*	*39*	*-72.0*	*39*	*0.0*	*39*	*0.0*
Pre-abnormal tax rate (%)	-	-	-	-	*139*	*39*	*-72.0*	*39*	*0.0*	*39*	*0.0*

Per share (US$)	**12/01**	**12/02**	**12/03**	**12/04**	**12/05**	**12/06E**	***% ch***	**12/07E**	***% ch***	**12/08E**	***% ch***
EPS (local GAAP)	-	-	-	-	(0.71)	0.70		0.74	*6.2*	0.79	*6.3*
EPS (UBS)	-	-	-	-	(0.51)	0.70		0.74	*6.2*	0.79	*6.3*
Net DPS	-	-	-	-	0.00	0.00		0.00		0.00	
Cash EPS	-	-	-	-	1.26	2.32	*84.5*	2.27	*-2.4*	2.32	*2.1*
BVPS	-	-	-	-	13.50	13.74	*1.8*	14.48	*5.4*	15.27	*5.4*

Balance sheet (US$m)	**12/01**	**12/02**	**12/03**	**12/04**	**12/05**	**12/06E**	***% ch***	**12/07E**	***% ch***	**12/08E**	***% ch***
Cash and equivalents	-	-	-	-	217	253	*16.7*	303	*19.7*	355	*17.3*
Other current assets	-	-	-	-	359	313	*-13.0*	313	*0.0*	313	*0.0*
Total current assets	**-**	**-**	**-**	**-**	**576**	**566**	***-1.8***	**616**	***8.8***	**668**	***8.5***
Net tangible fixed assets	-	-	-	-	630	604	*-4.2*	595	*-1.5*	586	*-1.5*
Net intangible fixed assets	-	-	-	-	1	1	*0.0*	1	*0.0*	1	*0.0*
Investments / other assets	0	0	0	0	21	32	*51.9*	32	*0.0*	32	*0.0*
Total assets	**-**	**-**	**-**	**-**	**1,228**	**1,202**	***-2.1***	**1,243**	***3.4***	**1,287**	***3.5***
Trade payables and other ST liabilities	0	0	0	0	341	254	*-25.6*	254	*0.0*	254	*0.0*
Short term debt	-	-	-	-	0	0		0		0	
Total current liabilities	**-**	**-**	**-**	**-**	**341**	**254**	***-25.6***	**254**	***0.0***	**254**	***0.0***
Long term debt	-	-	-	-	4	4	*4.8*	4	*0.0*	4	*0.0*
Other long term liabilities	-	-	-	-	127	151	*18.8*	151	*0.0*	151	*0.0*
Total liabilities	**-**	**-**	**-**	**-**	**472**	**409**	***-13.4***	**409**	***0.0***	**409**	***0.0***
Equity & minority interests	-	-	-	-	756	793	*5.0*	834	*5.1*	878	*5.2*
Total liabilities & equity	**-**	**-**	**-**	**-**	**1,228**	**1,202**	***-2.1***	**1,243**	***3.4***	**1,287**	***3.5***

Cash flow (US$m)	**12/01**	**12/02**	**12/03**	**12/04**	**12/05**	**12/06E**	***% ch***	**12/07E**	***% ch***	**12/08E**	***% ch***
Net income	-	-	-	-	(39)	38		41	*6.2*	43	*6.3*
Depreciation	-	-	-	-	98	89	*-8.3*	84	*-6.0*	84	*0.0*
Net change in working capital	-	-	-	-	(95)	(41)	*-56.7*	0		0	
Other (operating)	-	-	-	-	174	39	*-77.7*	0		0	
Net cash from operations	**-**	**-**	**-**	**-**	**137**	**125**	***-8.6***	**125**	***-0.4***	**127**	***2.1***
Capital expenditure	-	-	-	-	(69)	(61)	*-12.5*	(75)	*23.6*	(75)	*0.0*
Net acquisitions / disposals	-	-	-	-	0	0		0		0	
Other changes in investments	-	-	-	-	209	(35)		0		0	
Cash from investing activities	**-**	**-**	**-**	**-**	**139**	**(96)**		**(75)**	***-21.7***	**(75)**	***0.0***
Increase/(decrease) in debt	-	-	-	-	(281)	0		0		0	
Share issues / (repurchases)	-	-	-	-	0	0		0		0	
Dividends paid	-	-	-	-	(1)	(4)	*300.1*	(4)	*0.0*	(4)	*0.0*
Other cash from financing	-	-	-	-	(7)	(15)	*126.0*	0		0	
Cash from financing activities	**-**	**-**	**-**	**-**	**(289)**	**(20)**	***-93.2***	**(4)**	***-77.7***	**(4)**	***0.0***
Cash flow chge in cash & equivalents	**-**	**-**	**-**	**-**	**(13)**	**10**		**45**	***363.5***	**48**	***5.6***
FX / non cash items	-	-	-	-	-	26		4	*-83.4*	4	*0.0*
Bal sheet chge in cash & equivalents	**-**	**-**	**-**	**-**	**-**	**36**		**50**	***37.4***	**52**	***5.1***
Core EBITDA	-	-	-	-	233	165	*-29.2*	137	*-16.8*	142	*3.1*
Maintenance capital expenditure	-	-	-	-	(29)	(27)	*-8.3*	(25)	*-6.0*	(25)	*0.0*
Maintenance net working capital	-	-	-	-	0	0		0		0	
Operating free cash flow, pre-tax	**-**	**-**	**-**	**-**	**204**	**138**	***-32.2***	**112**	***-18.9***	**116**	***3.7***

Source: Company accounts, Thomson Financial, UBS estimates. (UBS) valuations are stated before goodwill, exceptionals and other special items. Note: For some companies, the data represents an extract of the full company accounts.

Global Equity Research

Americas

Chemicals, Specialty

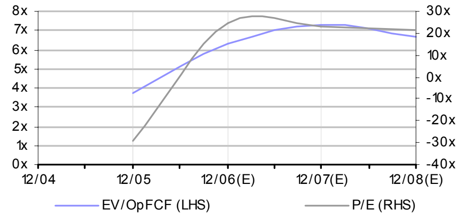
Rating	**Neutral 2**
Price target	**US$18.00**

CF Industries Holdings, Inc.

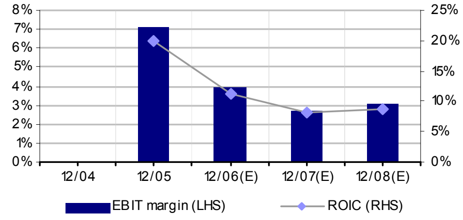
Company Profile

CF Industries Holdings, Inc. is a significant North American producer of nitrogen and phosphate fertilizers, with 2005 sales of $1.9 billion. The company operates the largest nitrogen fertilizer plant in the U.S. (Donaldsonville, LA) and in Canada (Medicine Hat, AB), generating three-quarters of 2005 sales from its nitrogen business. Sales are largely to customers in the U.S. (83%), with Canada (10%) and offshore making up the difference (7%). CF became a public company in August 2005 following a lengthy history as a private company owned by a group of regional agricultural cooperatives.

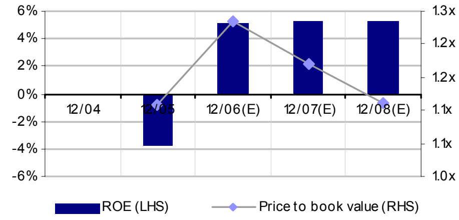
Value (EV/OpFCF & P/E)



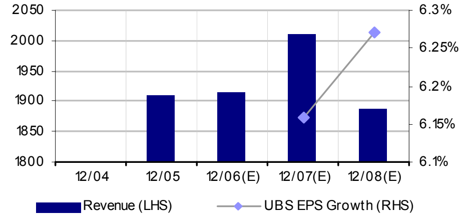
Profitability



ROE v Price to book value



Growth (UBS EPS)



Valuation (x)	**5Yr Avg**	**12/04**	**12/05**	**12/06E**	**12/07E**	**12/08E**
P/E (local GAAP)	-	-	NM	24.2	22.8	21.5
P/E (UBS)	-	-	NM	24.2	22.8	21.5
P/CEPS	-	-	11.9	7.3	7.5	7.3
Net dividend yield (%)	-	-	0.0	0.0	0.0	0.0
P/BV	-	-	1.1	1.2	1.2	1.1
EV/revenue (core)	-	-	0.4	0.5	0.4	0.4
EV/EBITDA (core)	-	-	3.3	5.3	6.0	5.4
EV/EBIT (core)	-	-	5.6	11.5	15.4	13.4
EV/OpFCF (core)	-	-	3.7	6.3	7.3	6.6
EV/op. invested capital	-	-	-	1.3	1.2	1.2

Enterprise value (US$m)	**12/04**	**12/05**	**12/06E**	**12/07E**	**12/08E**
Average market cap	-	823	932	932	932
+ minority interests	0	14	37	37	37
+ average net debt (cash)	-	(75)	(99)	(148)	(198)
+ pension obligations and other	0	0	0	0	0
- non-core asset value	-	0	0	0	0
Core enterprise value	-	761	870	821	771

Growth (%)	**5Yr Avg**	**12/04**	**12/05**	**12/06E**	**12/07E**	**12/08E**
Revenue	-	-	-	0.3	5.1	-6.1
EBITDA (UBS)	-	-	-	-29.2	-16.8	3.1
EBIT (UBS)	-	-	-	-44.2	-29.6	7.9
EPS (UBS)	-	-	-	-	6.2	6.3
Cash EPS	-	-	-	84.5	-2.4	2.1
DPS Net	-	-	-	-	-	-
BVPS	-	-	-	1.8	5.4	5.4

Margins (%)	**5Yr Avg**	**12/04**	**12/05**	**12/06E**	**12/07E**	**12/08E**
EBITDA / revenue	-	-	12.2	8.6	6.8	7.5
EBIT / revenue	-	-	7.1	4.0	2.7	3.0
Net profit (UBS) / revenue	-	-	NM	2.0	2.0	2.3
Return on capital (%)						
EBIT ROIC (UBS)	-	-	-	11.2	8.0	8.8
ROIC post tax	-	-	-	6.8	4.9	5.3
Net ROE	-	-	NM	5.1	5.3	5.3
Coverage ratios (x)						
EBIT / net interest	-	-	-	-	-	-
Dividend cover (UBS EPS)	-	-	-	-	-	-
Div. payout ratio (%, UBS EPS)	-	-	-	-	-	-
Net debt / EBITDA	-	-	NM	NM	NM	NM
Efficiency ratios (x)						
Revenue / op. invested capital	-	-	-	2.8	3.0	2.9
Revenue / fixed assets	-	-	-	3.1	3.3	3.2
Revenue / net working capital	-	-	-	11.3	10.9	10.2
Investment ratios (x)						
OpFCF / EBIT	-	-	1.5	1.8	2.1	2.0
Capex / revenue (%)	-	-	3.6	3.2	3.7	4.0
Capex / depreciation	-	-	0.7	0.7	0.9	0.9
Capital structure (%)						
Net debt / total equity	-	-	-10.0	-15.5	-20.8	-25.5
Net debt / (net debt + equity)	-	-	-11.3	-19.5	-27.8	-36.2
Net debt (core) / EV	-	-	-	-11.4	-18.1	-25.7

Source: Company accounts, Thomson Financial, UBS estimates. (UBS) valuations are stated before goodwill, exceptionals and other special items. Valuations: based on an average share price that year, (E): based on a share price of US$16.95 on 20 Sep 2006 19:35 EDT; Market cap (E) may include forecast share issues/buybacks.

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Americas

Chemicals, Commodity

The Mosaic Company

Potash exposure at a premium valuation

Phosphate with a potash kicker

Mosaic is the largest phosphate producer globally, with fiscal 2006 shipments of over ten million tonnes. We believe, however, that most of the value in the company is in the potash business—a segment that posts EBITDA margins of over 30% (vs. phosphate EBITDA margins in the teens).

Phosphate business may have the most upside

The phosphates business likely has the greatest opportunity to post improved results over the next couple of years, in our view, given the company's shutdown of high-cost, uncompetitive operations in May. We look for EBITDA in the phosphate segment to improve by $125 million in fiscal 2007 on the back of lower unit costs and stronger DAP/MAP pricing.

Reduce 2 rating based on valuation

While we like Mosaic's exposure to the potash and phosphate markets, we believe PotashCorp offers more attractively priced access to these markets. We initiate coverage of Mosaic with a Reduce 2 rating given our valuation concerns.

Valuation: The richest multiple in our global fertilizer coverage universe

Mosaic is richly valued vs. its global peers in our view. The shares trade at the richest multiple of any company in our global fertilizer coverage universe (2007E P/CFPS of 10.8x, EV/EBITDA of 9.2x). Our target price of $13 is based on 8.5x F2007E CFPS—in line with global peers.

Highlights (US$m)	05/05	05/06	05/07E	05/08E	05/09E
Revenues	4,397	5,306	5,340	5,486	5,415
EBIT (UBS)	385	322	761	949	943
Net income (UBS)	159	67	346	473	470
EPS (UBS, US$)	0.49	0.18	0.80	1.08	1.07
Net DPS (UBS, US$)	0.00	0.00	0.00	0.00	0.00

Profitability & Valuation	5-yr hist. av.	05/06	05/07E	05/08E	05/09E
EBIT margin %	-	6.1	14.2	17.3	17.4
ROIC (EBIT) %	-	4.8	11.4	13.3	12.4
EV/EBITDA x	-	13.1	9.2	7.8	7.8
PE (UBS) x	-	86.7	20.8	15.4	15.5
Net dividend yield %	-	0.0	0.0	0.0	0.0

Source: Company accounts, Thomson Financial, UBS estimates. (UBS) valuations are stated before goodwill, exceptionals and other special items.

Valuations: based on an average share price that year, (E): based on a share price of US$16.66 on 20 Sep 2006 17:55 EDT

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Rating	**Reduce 2** *Prior: Not Rated*
Price target	**US$13.00** *Prior: Not Rated*
Price	**US$16.66**

RIC: MOS.N BBG: MOS US

Trading data	
52-wk. range	US$17.11-12.76
Market cap.	US$7.29bn
Shares o/s	437m
Free float	35%
Avg. daily volume ('000)	470
Avg. daily value (US$m)	7.6

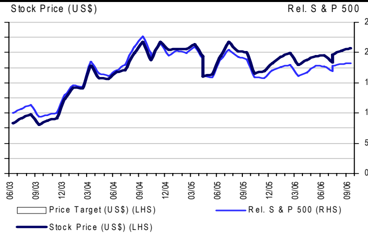
Balance sheet data 05/07E	
Shareholders' equity	US$3.89bn
P/BV (UBS)	1.9x
Net cash (debt)	(US$2.61bn)

Forecast returns	
Forecast price appreciation	-22.0%
Forecast dividend yield	0.0%
Forecast stock return	-22.0%
Market return assumption	9.9%
Forecast excess return	-31.9%

EPS (UBS, US$)

	05/07E			05/06
	From	To	Cons.	Actual
Q1E	-	0.33	-	0.19
Q2E	-	0.22	-	0.14
Q3E	-	0.09	-	(0.19)
Q4E	-	0.16	-	0.06
05/07E	-	0.80	-	
05/08E	-	1.08	-	

Performance (US$)



Source: UBS

www.ubs.com/investmentresearch

Potash exposure at a premium valuation

Mosaic is the largest phosphate fertilizer producer globally, although its potash business is worth more, in our view

Mosaic is the largest phosphate producer globally, with fiscal 2006 shipments of over ten million tonnes. We believe, however, that most of the value in the company is in the potash business—a segment that posts EBITDA margins of over 30% (vs. phosphate in the teens). While the potash business is the most valuable Mosaic asset, in our view, the phosphates business likely has the greatest opportunity to post improved results over the next couple of years given the company's shutdown of high-cost, uncompetitive operations in May. We look for EBITDA in the phosphate segment to improve by $125 million in fiscal 2007 on the back of lower unit costs and stronger DAP/MAP pricing.

The nitrogen business benefits from less expensive Alberta natural gas

The company's small nitrogen business consists of a 50% interest in the Belle Plain, Saskatchewan operation. Canadian nitrogen operations tend to outperform USGC peers, given their access to less expensive Alberta gas (AECO-Henry Hub spreads have exceeded a dollar per mcf for the past three years). The company's sizeable offshore segment is to some extent a loss-leader business that provides Mosaic with good access to international markets, but no positive free cash flow to speak of.

Mosaic's valuation appears stretched, in our view

While we like Mosaic's exposure to the potash and phosphate markets, we believe PotashCorp offers more attractively priced access to these markets. Furthermore, while phosphate markets are benefiting from the closure of Mosaic's weaker facilities in May, we believe that margins in this business are likely to face longer-term pressure from international competitors in Morocco, China and Saudi Arabia. We believe the stock is trading rich at a F2007E P/CFPS of 10.8x.

Table 25: Global fertilizer comparables

	EBITDA margin F2007E (%)	ROE F2007E (%)	Dividend yield F2007E (x)	Net debt to cap F2006 (%)	P/E F2007E (x)	P/CFPS F2007E (x)	EV/EBITDA F2007E (x)	Target P/CFPS F2007E (x)	Target EV/EBITDA F2007E (x)
Agrium Inc.	15.0	19.0	0.4	29.4	12.1	7.8	5.9	8.7	6.5
CF Industries	6.8	5.3	0.0	-18.4	22.8	7.5	6.0	7.9	6.4
Israel Chemicals	25.3	27.7	5.7	6.6	10.9	8.1	6.3	9.6	7.4
Mosaic	20.2	9.3	0.0	38.2	20.8	10.8	9.2	8.5	7.7
Potash Corporation	32.1	22.8	0.6	29.2	15.2	10.9	7.7	12.5	9.0
Yara	11.2	12.1	2.8	8.9	13.0	7.5	7.5	8.5	8.4
Group average	**18.4**	**16.0**	**1.6**	**15.6**	**15.8**	**8.8**	**7.1**	**9.3**	**7.6**

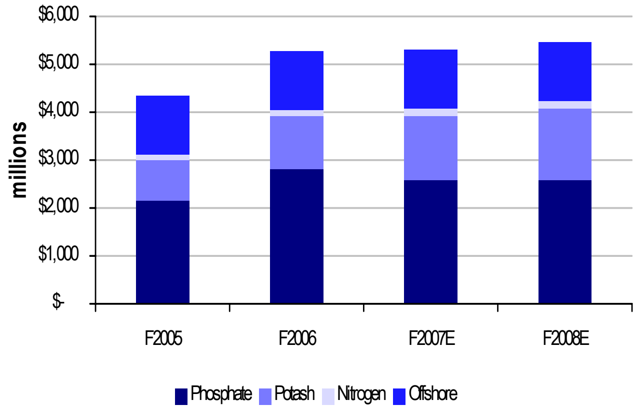
Source: UBS estimates

Company profile

Mosaic was formed in late 2004 when IMC Global combined with Cargill Crop Nutrition. With fiscal 2006 sales of $5.3 billion, Mosaic is the world's largest combined producer of phosphate and potash. The company operates in all segments of the fertilizer business, including phosphate, potash, and nitrogen; it also owns a well established international distribution network. With 10 million tonnes of phosphate fertilizer capacity, Mosaic is the largest phosphate producer worldwide. In 2006, phosphate accounted for 53% of net sales, potash 21%, and nitrogen 3%. The remaining portion of sales (23%) was from Mosaic's Offshore segment, which consists of fertilizer blending/bagging facilities, along with distribution assets and production facilities in Brazil and China.

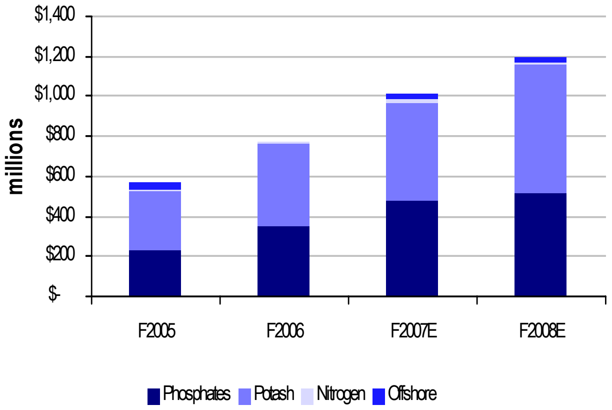
Mosaic was formed in late 2004 when IMC Global combined with Cargill Crop Nutrition

Chart 59: Mosaic—Sales breakdown



*Mosaic year-end is May 31
Source: Company reports, UBS estimates

Chart 60: Mosaic—EBITDA breakdown



Source: Company reports, UBS estimates

Phosphate operations

Mosaic's principal fertilizer products are DAP/MAP. Its phosphate operations have the capacity to produce roughly 4.9 million tonnes of phosphoric acid (12% of world capacity and 46% of US capacity), and has an annual capacity of 15 million tonnes of phosphate rock (11% of US capacity and 49% of global production). In addition, the company has 529 million tonnes of rock reserves, which would allow production for approximately 31 years at current mining rates. All of the company's phosphate mining operations are located in central Florida, where phosphate mining has been conducted since the late 1800s.

Mosaic's phosphate operations are focused on the DAP and MAP markets

Table 26: Mosaic—Phosphate portfolio

Mine	Capacity	Facility	Phosphoric Acid	DAP/MAP/ME	Feed Phosphate
million tonnes					
Four Corners	6.4	Bartow	1.0	2.3	-
South Fort Meade	6.0	New Wales	1.7	3.9	0.8
Hookers Prairie	2.1	Riverview	0.9	1.9	0.3
Hopewell	0.6	South Pierce	0.5	-	-
Total	15.0	Faustina	-	1.9	-
		Uncle Sam	0.9	-	-
		Total	4.9	9.9	1.0

Source: Company reports

Table 27: Mosaic—Phosphate reserves

Mines	million tonnes	Phosphate (%)
Active Mine		
Four Corners	65	29%
South Fort Meade	75	29%
Hookers Prairie	4	29%
Hopewell	2	30%
Total Active Mines	146	29%
Idle Mine		
Wingate	6	29%
Closed Mines		
Fort Meade	18	30%
Fort Green	58	28%
Total Closed Mines	76	28%
Future Mines		
Ona/Pioneer	154	30%
Pine Level	148	30%
Total Future Mines	302	30%
Total Mines	529	29%

Source: Company reports

Potash operations

Mosaic is the third largest potash producer in the world

As one of the largest potash producers in the world, Mosaic has operations in Canada and the US, and distributes potash in North America and internationally. Total capacity is approximately 9.3 million tonnes or 13% of world capacity (35% of North American capacity). Given current rates of production, Mosaic believes its reserves (owned and leased) are sufficient to support operations for more than a century. We note that profit margins in Mosaic’s potash segment are materially lower than those of PotashCorp and Agrium. Part of this gap is explained by a difference in accounting treatment for royalties in the potash business, which likely understates Mosaic’s potash profitability (vs. PotashCorp and Agrium) by approximately $20/tonne. Net-net, though, we believe Mosaic’s potash assets do post lower margins on an apples-to-apples basis.

Table 28: Mosaic—Potash reserves

	million tonnes	Potash (%)
Canadian Mines		
Belle Plaine	687	18%
Colonsay	275	26%
Esterhazy	571	25%
Sub-totals	1,533	22%
United States Mines		
Carlsbad	107	9%
Hersey	40	27%
Sub-totals	147	14%
Total	1,680	21%

Source: Company reports

Nitrogen operations

Mosaic has a 50% interest in Saskferco Products, a world scale nitrogen facility

The company's primary nitrogen operations consist of a 50% equity ownership in Saskferco Products Inc (Saskferco), a world-scale and energy-efficient nitrogen facility combined with Mosaic's sales and distribution business. The nitrogen operation acts as the exclusive marketing agent for Saskferco and also sells nitrogen products purchased from unrelated parties. The company's primary nitrogen facilities are located near Belle Plaine, Saskatchewan, and have the capacity to produce 1.9 million tons of ammonia, 2.9 million tons of urea and 650,000 tons of UAN all on an annual basis.

Table 29: Mosaic—Nitrogen product portfolio

Product	Annual Capacity	Tonnage for sale
Ammonia	650	30
Urea	1000	na
Granular Urea	1000	880
Nitric Acid	80	na
AN Solution	100	na
UAN Solution	230	230
MicroCran Feed Urea	50	50
Total		1190

Source: Company reports

Offshore operations

Mosaic's offshore segment includes a distribution network, as well as blending facilities and ownership in production facilities in South America and China

The remaining operating segment is Mosaic's offshore business, which is comprised of a distribution network (port facilities, terminals, etc), as well as blending facilities and ownership in production facilities in South America and China. In Brazil, Mosaic is fully integrated and ranks as one of the largest producer/distributors of blended fertilizers. Mosaic's Brazilian operations distribute approximately 2 million tonnes. Mosaic also owns 18.6% of Ultrafertil, S.A. through its one-third ownership of Fertifos, S.A. (Fertifos owns 55.9% of Fosfertil—a publicly traded company, which in turn owns 100% of Ultrafertil). Ultrafertil is the largest phosphate-based fertilizer manufacturer in Brazil, operating a phosphate rock mine and processing facility, as well as two nitrogen plants and a modern port facility. The offshore segment also includes production and distribution assets throughout Argentina, Chile, China, India and Thailand.

Table 30: Mosaic—EPS sensitivity to fertilizer prices

Commodity	
Phosphate (+/- US$10/tonne)	$0.11
Potash (+/- US$10/tonne)	$0.09

Source: Company reports

Key issues

- **Phosphate consolidation**—Mosaic's closure of its Green Bay and South Pierce processing plants has resulted in the removal of approximately 11% of US phosphate fertilizer supply (P_2O_5 basis) and about one-fifth of Mosaic's capacity. We expect the closure of Mosaic's facilities to encourage tight market conditions for at least the next year, until we see capacity additions in Morocco, China and elsewhere in 2007/2008.

- **Reduce debt**—Mosaic will seek to reduce its $2.6 billion debt load materially over coming years. We expect net debt to cap of 41% to decline to the mid-thirties over the next two years, which could lead to an investment grade credit rating and lower interest expense.

- **Cargill position**—Cargill, Inc. owns about 65.3% of Mosaic's common stock. While this position is subject to various lock-ups (i.e., no sale prior to October 2007), any action by Cargill upon expiry of these lock-ups could have a material impact on Mosaic's share price and/or share liquidity.

- **Land position**—Mosaic is one of the largest land owners in Florida, with holdings of 260,000 acres. The more of this land that is marketed as higher and better use (HBU), the larger the value of the holding overall. We believe values well in excess of $1,000/acre for HBU land are attainable.

- **Valuation**—Mosaic is richly valued vs. its global peers, in our view. The shares trade at a F2007E P/CFPS of 10.3x, the richest multiple of any company in our global fertilizer coverage universe.

Phosphate consolidation

Mosaic closed its least efficient phosphate operations in May 2006

On 2 May 2006, Mosaic announced that it was restructuring its phosphate business. The South Pierce and Green Bay phosphate fertilizer production plants, as well as the Fort Green mine in central Florida, were closed indefinitely. These three facilities ranked as Mosaic's highest-cost Florida operations. As a result of the restructuring, the company expects annual savings of $100 million in fiscal 2007.

With the closure of the Fort Green mine (annual capacity of 4.9 million tonnes of phosphate rock), Mosaic's capacity will be 15 million tonnes. The Fort Green mine had high cash costs due to the distance between its operation and processing facilities, and despite its high operation rates, was producing the lowest-quality rock. The closure of the Green Bay and South Pierce processing plants has resulted in the removal of approximately 11% of US phosphate fertilizer supply (P_2O_5 basis) and about one-fifth of Mosaic's capacity.

We expect the closure of Mosaic's facilities to encourage tight market conditions for at least the next year, before expected capacity additions in Morocco, China and elsewhere in 2007/2008. The restructuring plan is expected to lower costs and improve margins and cash flow as Mosaic maximizes production at its most efficient phosphate operations. The company expects the restructuring will result in lower raw material and operating costs, reduced capital expenditures and higher cash flow by 2007. Management expects profitability in the phosphate segment to improve by more than $100 million in fiscal 2007 as a result of the restructuring.

Reduce debt

Mosaic is likely to focus on debt reduction over coming years

As of 31 May 2006, Mosaic had $2.6 billion in debt (debt to capital of 43%). The company intends to allocate free cash flow over coming quarters and years to reduce debt and improve the strength of the balance sheet. Approximately one third of Mosaic's total long-term debt is scheduled to mature within the next three years. Interest obligations in F2005 and F2006 were $0.44 and $0.37 per share, respectively. We expect interest expense to continue to decline (F2007 forecast of $0.36/share) as the company continues to generate free cash flow. Management has stated that it is committed to achieving an investment grade credit rating, which would likely require a debt to capital ratio of 35-37%.

Table 31: Mosaic—Long-term debt, estimated interest payment obligations as of 31 May 2006

millions	Total	Less than 1 year	1-3 years	3-5 years	More than 5 years
Long-term debt	2,245.3	19.1	732.7	86.5	1,407.0
Estimated interest payments on long-term debt*	1,205.6	213.4	347.2	276.7	368.3

*Based on interest rates and debt balances as of 31 May 2006.
Source: Mosaic

The seasonal nature of the fertilizer industry also means that large amounts of working capital will be required entering the spring and fall. Therefore, having adequate liquidity and a strong balance sheet is paramount in the industry.

Cargill position

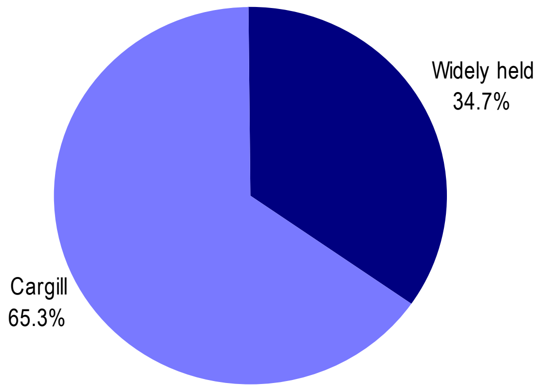
Cargill owns 65% of Mosaic's common equity, but is subject to a number of standstill provisions

Cargill holds approximately 65.3% of Mosaic's common equity by virtue of the Cargill Crop Nutrition assets that it contributed upon Mosaic's formation in October 2004. Cargill's equity position in Mosaic is subject to a standstill agreement that prevents Cargill from selling, disposing of, transferring or otherwise reducing its interest in Mosaic prior to 22 October 2007. Furthermore, the standstill agreement prevents Cargill from increasing its interest in Mosaic until 22 October 2008.

Should Cargill choose to dispose of all or a portion of its 285 million Mosaic shares after 22 October 2007, the share price could see pressure related to the placing of a block of this size. Depending on how such a sale were to take place, however, share liquidity in Mosaic could improve materially.

Cargill owns approximately 285 million Mosaic common shares

Chart 61: Mosaic ownership



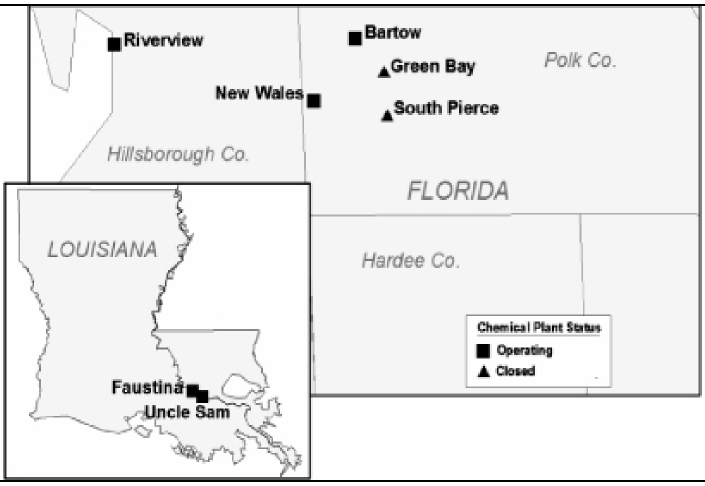
Source: Company reports

Maximize real-estate value

Mosaic is amongst the largest private land owners in Florida

Mosaic is one of the largest land owners in Florida, with holdings of 260,000 acres (approximately 400 square miles). The company is developing a strategy to maximize land value. As one of the largest land owners in Florida, Mosaic is in a position to take advantage of the more than 300,000 people migrating to the state each year. Like other large corporate landowners (i.e., Plum Creek, International Paper, etc.), the company is likely to recognize a wide range of values for individual land parcels based on location, proximity to population centres, etc. The more of this land that is marketed as higher and better use (HBU), the larger the value of the holding overall. We believe values well in excess of $1,000/acre for HBU land are attainable.

Chart 62: Mosaic—Phosphate concentrate plants in the US



Source: Company reports

Valuation

Mosaic is richly valued compared with its global peers, in our view. The shares trade at a F2007E EV/EBITDA of 9.2x and 10.8x P/CFPS, the richest multiples in our global fertilizer coverage universe. We believe the shares deserve to trade at the high end of global peers based on the company's exposure to potash, its scale (market cap significantly larger than Agrium and CF), and the company's position as the largest, US based fertilizer company.

Our target price of $13 is based on a 7.7x multiple of 2007e EBITDA and 8.5x F2007E P/CFPS, the range in which top-tier peers PotashCorp and Yara currently trade. We rate the shares Reduce 2. Our predictability rating of 2 reflects our view that the fertilizer industry is inherently volatile and therefore earnings/profitability are difficult to predict.

Table 32: Global fertilizer comparables

	EBITDA margin F2007E (%)	ROE F2007E (%)	Dividend yield F2007E (x)	Net debt to cap F2006 (%)	P/E F2007E (x)	P/CFPS F2007E (x)	EV/EBITDA F2007E (x)	Target P/CFPS F2007E (x)	Target EV/EBITDA F2007E (x)
Agrium Inc.	15.0	19.0	0.4	29.4	12.1	7.8	5.9	8.7	6.5
CF Industries	6.8	5.3	0.0	-18.4	22.8	7.5	6.0	7.9	6.4
Israel Chemicals	25.3	27.7	5.7	6.6	10.9	8.1	6.3	9.6	7.4
Mosaic	20.2	9.3	0.0	38.2	20.8	10.8	9.2	8.5	7.7
Potash Corporation	32.1	22.8	0.6	29.2	15.2	10.9	7.7	12.5	9.0
Yara	11.2	12.1	2.8	8.9	13.0	7.5	7.5	8.5	8.4
Group average	**18.4**	**16.0**	**1.6**	**15.6**	**15.8**	**8.8**	**7.1**	**9.3**	**7.6**

Source: UBS estimates

The Mosaic Company

Income statement (US$m)	05/02	05/03	05/04	05/05	05/06	05/07E	% ch	05/08E	% ch	05/09E	% ch
Revenue	-	-	-	4,397	5,306	5,340	0.7	5,486	2.7	5,415	-1.3
Operating expenses (ex depn)	-	-	-	(3,793)	(4,660)	(4,260)	-8.6	(4,217)	-1.0	(4,152)	-1.5
EBITDA (UBS)	-	-	-	604	646	1,081	67.3	1,269	17.4	1,263	-0.5
Depreciation	-	-	-	(219)	(324)	(320)	-1.3	(320)	0.0	(320)	0.0
Operating income (EBIT, UBS)	-	-	-	385	322	761	136.4	949	24.8	943	-0.7
Other income and associates	-	-	-	0	(271)	0		0		0	
Net interest	-	-	-	(121)	(167)	(155)	-6.6	(125)	-19.6	(125)	0.0
Abnormal items (pre-tax)	-	-	-	0	0	0		0		0	
Profit before tax	-	-	-	264	(116)	605		824	36.2	818	-0.8
Tax	-	-	-	(98)	(5)	(246)	4536.	(337)	37.3	(335)	-0.8
Profit after tax	-	-	-	166	(121)	360		487	35.4	483	-0.7
Abnormal items (after tax)	-	-	-	0	0	0		0		0	
Minorities / pref dividends	0	0	0	(6)	(11)	(14)	22.5	(14)	0.0	(14)	0.0
Net income (local GAAP)	-	-	-	159	(133)	346		473	36.8	470	-0.8
Net income (UBS)	-	-	-	159	67	346	414.7	473	36.8	470	-0.8
Tax rate (%)	0	0	0	37	0	41		41	0.8	41	0.0
Pre-abnormal tax rate (%)	0	0	0	37	0	41		41	0.8	41	0.0

Per share (US$)	05/02	05/03	05/04	05/05	05/06	05/07E	% ch	05/08E	% ch	05/09E	% ch
EPS (local GAAP)	-	-	-	0.44	(0.35)	0.79		1.08	36.8	1.07	-0.8
EPS (UBS)	-	-	-	0.44	0.18	0.79	349.8	1.08	36.8	1.07	-0.8
Net DPS	-	-	-	0.00	0.00	0.00		0.00		0.00	
Cash EPS	-	-	-	1.15	1.02	1.54	50.3	1.81	17.9	1.81	-0.5
BVPS	-	-	-	8.48	9.19	8.90	-3.2	10.01	12.5	11.11	11.0

Balance sheet (US$m)	05/02	05/03	05/04	05/05	05/06	05/07E	% ch	05/08E	% ch	05/09E	% ch
Cash and equivalents	-	-	-	245	173	593	242.1	1,140	92.2	1,683	47.7
Other current assets	-	-	-	1,487	1,407	1,407	0.0	1,407	0.0	1,407	0.0
Total current assets	-	-	-	1,732	1,580	2,000	26.5	2,547	27.3	3,090	21.3
Net tangible fixed assets	-	-	-	4,121	4,417	4,357	-1.4	4,297	-1.4	4,237	-1.4
Net intangible fixed assets	-	-	-	2,160	2,347	2,347	0.0	2,347	0.0	2,347	0.0
Investments / other assets	0	0	0	430	377	377	0.0	377	0.0	377	0.0
Total assets	-	-	-	8,444	8,721	9,080	4.1	9,567	5.4	10,050	5.1
Trade payables and other ST liabilities	0	0	0	902	904	904	0.0	904	0.0	904	0.0
Short term debt	-	-	-	205	222	222	0.0	222	0.0	222	0.0
Total current liabilities	-	-	-	1,107	1,126	1,126	0.0	1,126	0.0	1,126	0.0
Long term debt	-	-	-	2,464	2,388	2,388	0.0	2,388	0.0	2,388	0.0
Other long term liabilities	-	-	-	1,638	1,655	1,655	0.0	1,655	0.0	1,655	0.0
Total liabilities	-	-	-	5,209	5,169	5,169	0.0	5,169	0.0	5,169	0.0
Equity & minority interests	-	-	-	3,235	3,551	3,911	10.1	4,398	12.4	4,881	11.0
Total liabilities & equity	-	-	-	8,444	8,721	9,080	4.1	9,567	5.4	10,050	5.1

Cash flow (US$m)	05/02	05/03	05/04	05/05	05/06	05/07E	% ch	05/08E	% ch	05/09E	% ch
Net income	-	-	-	166	(121)	360		487	35.4	483	-0.7
Depreciation	-	-	-	219	324	320	-1.3	320	0.0	320	0.0
Net change in working capital	-	-	-	(37)	(137)	0		0		0	
Other (operating)	-	-	-	(14)	214	102	-52.2	106	3.8	106	-0.3
Net cash from operations	-	-	-	334	280	782	179.6	913	16.8	909	-0.4
Capital expenditure	-	-	-	(255)	(390)	(260)	-33.2	(260)	0.0	(260)	0.0
Net acquisitions / disposals	-	-	-	1	0	0		0		0	
Other changes in investments	-	-	-	39	39	0		0		0	
Cash from investing activities	-	-	-	(215)	(351)	(260)	-25.8	(260)	0.0	(260)	0.0
Increase/(decrease) in debt	-	-	-	107	(6)	0		0		0	
Share issues / (repurchases)	-	-	-	36	29	0		0		0	
Dividends paid	-	-	-	(5)	0	0		0		0	
Other cash from financing	-	-	-	(15)	(13)	0		0		0	
Cash from financing activities	-	-	-	116	(1)	(10)	1633.	(10)	0.0	(10)	0.0
Cash flow chge in cash & equivalents	-	-	-	235	(72)	511		642	25.7	638	-0.6
FX / non cash items	-	-	-	-	(0)	(92)	13167	(96)	4.3	(95)	-0.3
Bal sheet chge in cash & equivalents	-	-	-	-	(72)	420		547	30.3	543	-0.7
Core EBITDA	-	-	-	604	646	1,081	67.3	1,269	17.4	1,263	-0.5
Maintenance capital expenditure	-	-	-	(66)	(97)	(96)	-1.3	(96)	0.0	(96)	0.0
Maintenance net working capital	-	-	-	0	0	0		0		0	
Operating free cash flow, pre-tax	-	-	-	538	549	985	79.5	1,173	19.1	1,167	-0.5

Source: Company accounts, Thomson Financial, UBS estimates. (UBS) valuations are stated before goodwill, exceptionals and other special items. Note: For some companies, the data represents an extract of the full company accounts.

Global Equity Research

Americas

Chemicals, Commodity

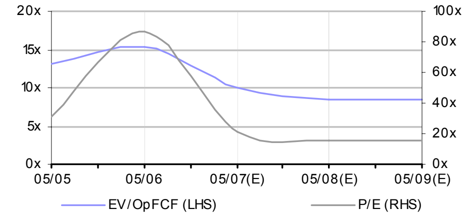
Rating	**Reduce 2**
Price target	**US$13.00**

The Mosaic Company

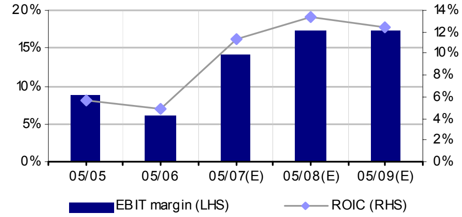
Company Profile

The Mosaic Company is a significant North American producer of phosphate and potash fertilizers, with fiscal 2006 sales of $5.3 billion. The company is the largest producer of phosphate fertilizer globally and the third largest potash producer. About one-half of sales are generated by the phophates segment, 20% potash, 3% nitrogen fertilizer and 28% offshore distribution. Sales are geographically diverse, with 30% to customers in the US and 70% offshore. Mosaic is a result of the combination of IMC Global Inc. and Cargill Crop Nutrition in October 2004.

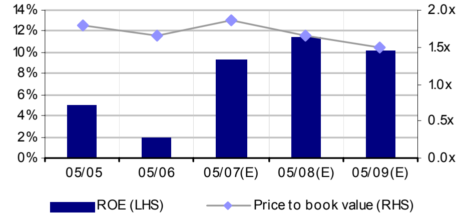
Value (EV/OpFCF & P/E)



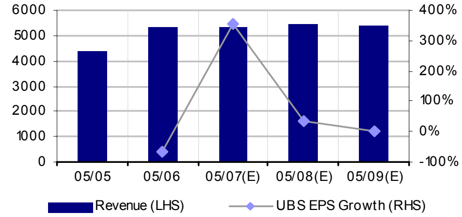
Profitability



ROE v Price to book value



Growth (UBS EPS)



Valuation (x)	**5Yr Avg**	**05/05**	**05/06**	**05/07E**	**05/08E**	**05/09E**
P/E (local GAAP)	-	31.4	NM	20.8	15.4	15.5
P/E (UBS)	-	31.4	NM	20.8	15.4	15.5
P/CEPS	-	13.2	14.9	10.8	9.2	9.2
Net dividend yield (%)	-	0.0	0.0	0.0	0.0	0.0
P/BV	-	1.8	1.7	1.9	1.7	1.5
EV/revenue (core)	-	1.6	1.6	1.9	1.8	1.8
EV/EBITDA (core)	-	11.7	13.1	9.2	7.8	7.8
EV/EBIT (core)	-	18.4	26.3	13.0	10.4	10.5
EV/OpFCF (core)	-	13.2	15.4	10.0	8.4	8.5
EV/op. invested capital	-	-	1.3	1.5	1.4	1.3

Enterprise value (US$m)	**05/05**	**05/06**	**05/07E**	**05/08E**	**05/09E**
Average market cap	4,214	5,810	7,286	7,286	7,286
+ minority interests	322	319	319	319	319
+ average net debt (cash)	2,669	2,639	2,610	2,610	2,610
+ pension obligations and other	251	0	0	0	0
- non-core asset value	(364)	(319)	(319)	(319)	(319)
Core enterprise value	7,092	8,449	9,896	9,896	9,896

Growth (%)	**5Yr Avg**	**05/05**	**05/06**	**05/07E**	**05/08E**	**05/09E**
Revenue	-	-	20.7	0.7	2.7	-1.3
EBITDA (UBS)	-	-	7.0	67.3	17.4	-0.5
EBIT (UBS)	-	-	-16.3	136.4	24.8	-0.7
EPS (UBS)	-	-	-63.8	NM	35.4	-0.8
Cash EPS	-	-	-11.4	50.3	17.9	-0.5
DPS Net	-	-	-	-	-	-
BVPS	-	-	8.4	-3.2	12.5	11.0

Margins (%)	**5Yr Avg**	**05/05**	**05/06**	**05/07E**	**05/08E**	**05/09E**
EBITDA / revenue	-	13.7	12.2	20.2	23.1	23.3
EBIT / revenue	-	8.7	6.1	14.2	17.3	17.4
Net profit (UBS) / revenue	-	3.6	1.3	6.5	8.6	8.7
Return on capital (%)						
EBIT ROIC (UBS)	-	-	4.8	11.4	13.3	12.4
ROIC post tax	-	-	4.8	6.7	7.9	7.3
Net ROE	-	5.0	2.0	9.3	11.4	10.2
Coverage ratios (x)						
EBIT / net interest	-	3.2	1.9	4.9	7.6	7.5
Dividend cover (UBS EPS)	-	-	-	-	-	-
Div. payout ratio (%, UBS EPS)	-	-	-	-	-	-
Net debt / EBITDA	-	4.4	4.0	2.4	2.1	2.1
Efficiency ratios (x)						
Revenue / op. invested capital	-	-	0.8	0.8	0.8	0.7
Revenue / fixed assets	-	-	0.8	0.8	0.8	0.8
Revenue / net working capital	-	-	7.0	6.0	4.0	2.8
Investment ratios (x)						
OpFCF / EBIT	-	1.4	1.7	1.3	1.2	1.2
Capex / revenue (%)	-	5.8	7.3	4.9	4.7	4.8
Capex / depreciation	-	1.2	1.2	0.8	0.8	0.8
Capital structure (%)						
Net debt / total equity	-	82.5	73.5	66.7	59.4	53.5
Net debt / (net debt + equity)	-	45.4	42.5	40.2	37.4	34.9
Net debt (core) / EV	-	-	30.1	25.6	25.6	25.6

Source: Company accounts, Thomson Financial, UBS estimates. (UBS) valuations are stated before goodwill, exceptionals and other special items. Valuations: based on an average share price that year, (E): based on a share price of US$16.66 on 20 Sep 2006 19:35 EDT; Market cap (E) may include forecast share issues/buybacks.

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Americas

Chemicals, Specialty

Potash Corporation

The best potash exposure

- **Large, low-cost potash production with excess capacity**

PotashCorp is the world's largest producer of potash and also has the largest unused capacity and reserves. For years it has acted as a swing producer, balancing supply to the market to support price. It also has ownership positions in Arab Potash, SQM and Israel Chemicals, which are major potash producers.

- **Phosphate and nitrogen exposure also**

PotashCorp is the world's third largest phosphate producer, with a strong rock position. Its North Carolina plant is one of the world's lowest-cost producers of P_2O_5. The company focuses its sales on the higher-margin animal feed and industrial product markets. Its nitrogen operations are backed by its low-cost Trinidad facility.

- **PotashCorp to continue to generate large free cash flow**

We expect PotashCorp to use its strong free cash flow to continue to consolidate its potash position, invest in niche specialty fertilizer markets and potentially share buybacks and/or dividends. Possible investments include increased ownership in Arab Potash, SQM, and/or Israel Chemicals.

- **Valuation: Premium multiple warranted**

Applying a P/CF multiple of 10x (which we believe is for a company with long-term, low-cost reserves and industry leadership in our preferred commodity) to our 2007 CFPS estimate of $9.50, excluding investments, and adding the market value of investments of about $20/share, we derive our price target of $115.

Highlights (US$m)	12/04	12/05	12/06E	12/07E	12/08E
Revenues	2,902	3,476	3,303	3,798	-
EBIT (UBS)	458	843	766	950	-
Net income (UBS)	308	543	551	687	-
EPS (UBS, US$)	2.78	4.89	5.20	6.49	-
Net DPS (UBS, US$)	0.52	0.60	0.60	0.60	-

Profitability & Valuation	5-yr hist. av.	12/05	12/06E	12/07E	12/08E
EBIT margin %	-	24.3	23.2	25.0	-
ROIC (EBIT) %	-	23.1	19.2	22.7	-
EV/EBITDA x	-	9.9	9.7	7.7	-
PE (UBS) x	-	18.4	19.3	15.5	-
Net dividend yield %	-	0.7	0.6	0.6	-

Source: Company accounts, Thomson Financial, UBS estimates. (UBS) valuations are stated before goodwill, exceptionals and other special items.

Valuations: based on an average share price that year, (E): based on a share price of US$100.35 on 20 Sep 2006 17:56 EDT

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Analyst
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Rating	**Buy 2** ***Unchanged***
Price target	**US$115.00** ***Unchanged***
Price	**US$100.35**

RIC: POT.N BBG: POT US

Trading data	
52-wk. range	US$106.04-73.15
Market cap.	US$10.4bn
Shares o/s	104m
Free float	100%
Avg. daily volume ('000)	443
Avg. daily value (US$m)	40.8

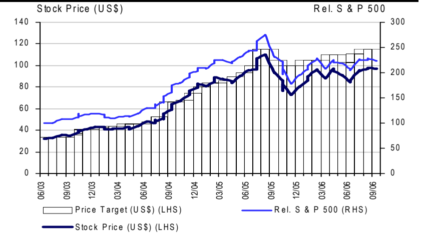
Balance sheet data 12/06E	
Shareholders' equity	US$2.70bn
P/BV (UBS)	3.9x
Net cash (debt)	(US$1.24bn)

Forecast returns	
Forecast price appreciation	+14.6%
Forecast dividend yield	0.6%
Forecast stock return	+15.2%
Market return assumption	9.0%
Forecast excess return	+6.2%

EPS (UBS, US$)

	12/06E			12/05
	From	To	Cons.	Actual
Q1	1.07	1.07	*1.19*	1.15
Q2	1.20	1.20	*1.20*	1.46
Q3E	1.33	1.33	*1.38*	1.17
Q4E	1.60	1.60	*1.55*	1.09
12/06E	5.20	5.20	*5.34*	
12/07E	6.49	6.49	*6.31*	

Performance (US$)



Source: UBS

www.ubs.com/investmentresearch

The best potash exposure

PotashCorp is the world's largest and one of the lowest-cost publicly traded potash producers. Its potash reserves are sufficient for over 100 years of production. The company also controls about 70% of the world's excess capacity and has always followed a price leadership strategy whereby it has matched production to sales. Furthermore, it has investment positions in three other major producers: Arab Potash (APC, 28% interest, but markets 100% of the potash), SQM (25% interest) and Israel Chemicals (ICL, 10% interest).

PotashCorp is the world's largest and one of the lowest-cost publicly traded potash producers

PotashCorp is also the world's third largest phosphate producer, with a low-cost rock position. Current reserves should last more than 50 years. PotashCorp has plants in North Carolina and Florida, and its North Carolina plant is one of the world's lowest-cost producers of phosphoric acid, the feedstock for many other products. Its high-quality rock allows economic production of feed and industrial products, which historically have offered higher margins and a more attractive environment that is independent of fertilizer cycles. This is a competitive advantage, as it results in a higher gross margin and reduces volatility.

PotashCorp is also the world's third largest phosphate producer, with a low-cost rock position

PotashCorp's nitrogen business is one of the world's largest, with seven plants in the US and a large complex in Trinidad. However, given higher natural gas prices in the US, the company only operates three plants and focuses on stable industrial markets. Its Trinidad plant, which provided 65% of the company's total ammonia production in 2005, benefits from long-term, low-cost natural gas contracts.

PotashCorp's major nitrogen asset is in Trinidad

PotashCorp trades at higher multiples vs. its competitors. We believe this is warranted given its greater exposure to potash, its higher margins and option value of paid-for, but unused capacity. The key issue facing the company will be the redeployment of its substantial free cash flow going forward. We note its investments in related potash companies and Sinofert are worth about $20/share.

Table 33: Global fertilizer comparables

	EBITDA margin F2007E (%)	ROE F2007E (%)	Dividend yield F2007E (x)	Net debt to cap F2006 (%)	P/E F2007E (x)	P/CFPS F2007E (x)	EV/EBITDA F2007E (x)	Target P/CFPS F2007E (x)	Target EV/EBITDA F2007E (x)
Agrium Inc.	15.0	19.0	0.4	29.4	12.1	7.8	5.9	8.7	6.5
CF Industries	6.8	5.3	0.0	-18.4	22.8	7.5	6.0	7.9	6.4
Israel Chemicals	25.3	27.7	5.7	6.6	10.9	8.1	6.3	9.6	7.4
Mosaic	20.2	9.3	0.0	38.2	20.8	10.8	9.2	8.5	7.7
Potash Corporation	32.1	22.8	0.6	29.2	15.2	10.9	7.7	12.5	9.0
Yara	11.2	12.1	2.8	8.9	13.0	7.5	7.5	8.5	8.4
Group average	**18.4**	**16.0**	**1.6**	**15.6**	**15.8**	**8.8**	**7.1**	**9.3**	**7.6**

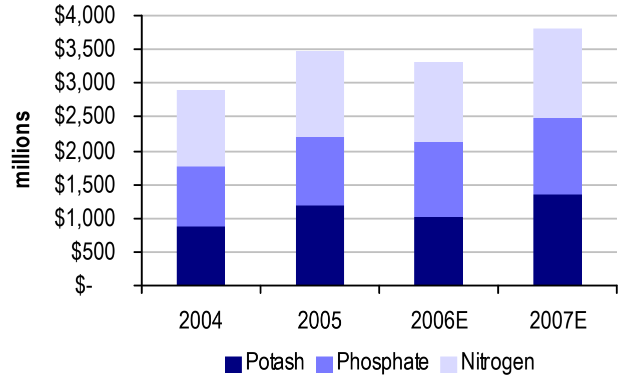
Source: UBS estimates

Company profile

PotashCorp is the successor company to CIC Mineral Interests Corporation, which was established in 1975 by the Province of Saskatchewan. In 1989, the government of Saskatchewan decided to privatize its potash operations and PotashCorp became a public company. Current government ownership is zero, but there are requirements that the head office remain in Saskatchewan. Throughout the 1990s, the company restricted production by shutting down capacity to support prices and used its free cash flow to continue to consolidate the industry. As a result, the company now has six potash mines with a capacity of about 12.9 million tonnes (about 20% of world capacity).

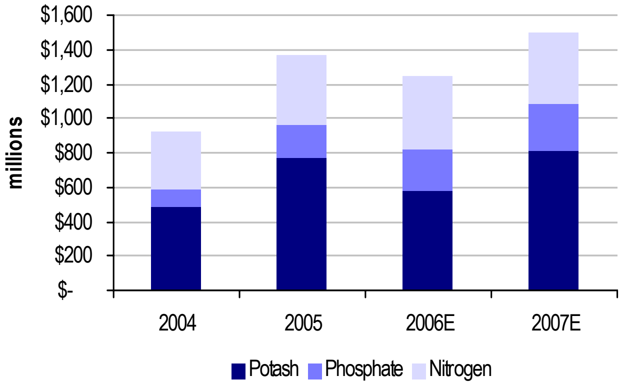
Subsequent to potash consolidation, the company entered the phosphate market in 1995 and through two acquisitions became the third-largest producer of phosphate. Finally, in 1997 the company purchased Acadian and became one of the largest producers of nitrogen in North America. As a result, PotashCorp has the largest fertilizer capacity in the world, with exposure to all three nutrients as outlined in Chart 63 and Chart 64. Most importantly, it has the largest capacity in the most profitable business – potash.

Chart 63: PotashCorp—Sales breakdown



Source: Company reports, UBS estimates

Chart 64: PotashCorp—EBITDA breakdown



Source: Company reports, UBS estimates

Potash operations

The company owns and operates six potash mines, and has a 25% interest in a seventh, which are low-cost and have long reserve lives

The company owns and operates six potash mines, and has a 25% interest in a seventh via an arrangement with Mosaic at its Esterhazy mine. Six of these mines are located in Saskatchewan, serving North American markets and offshore markets through Vancouver. The other is located in New Brunswick, serving North American markets and offshore markets through Saint John.

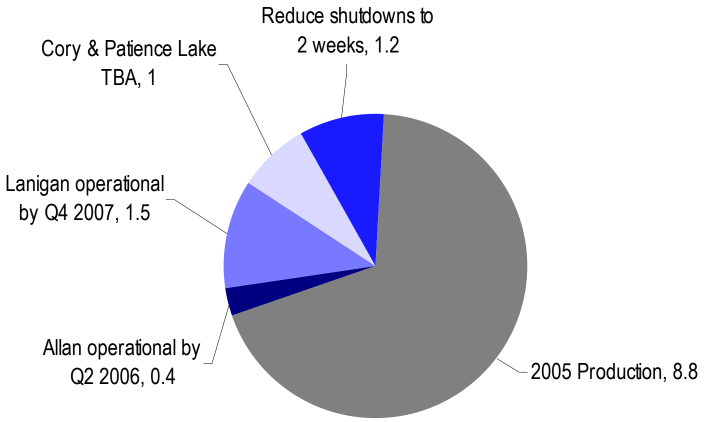
PotashCorp's Saskatchewan operations are large, automated and use continuous mining machines, which leads to a low-cost structure. As shown in Table 34, PotashCorp has 12.9 million tonnes of capacity available. However, it has always followed a price leadership strategy and, therefore, has shut down mines to balance supply and demand and support price. Given the favourable outlook for potash, the company is now investing $302 million ($159/tonne vs. greenfield of $800/tonne) to bring back idled capacity at the Lanigan and Allan mines, which will give the company an additional 1.9 million tonnes of production by late 2007, as shown in Chart 65. An additional benefit as they ramp up production is lower costs as the company pays workers to take shutdowns and about 30% of the costs are fixed.

Table 34: PotashCorp—Potash capacity (million tonnes), 2005

	Capacity
Lanigan SK	3.828
Roncanville SK	3.044
Allan SK	1.885
Cory SK	1.361
Patience Lake SK	1.033
Esterhazy SK	0.953
New Brunswick NB	0.785
Total	12.889

Source: Company reports

Chart 65: PotashCorp—Capacity breakdown, million tonnes KCl



Source: Company report

Currently, PotashCorp controls about 70% of the world's excess potash capacity . . .

Currently, PotashCorp controls about 70% of the world's excess potash capacity. Thus, as world demand for potash increases, PotashCorp should be the biggest beneficiary, subject to new competition. Furthermore, as most of the growth is in the offshore market, PotashCorp should be the largest beneficiary of the major North American producers. It has the greatest share of Canpotex (about 56% based on capacity), which is the company that sells offshore Canadian potash from Saskatchewan for the major producers (PotashCorp, Mosaic and Agrium). The majority of the company's production is in Saskatchewan, which uses Vancouver to reach the offshore market. Therefore, the company has a competitive transportation advantage to key markets such as China, given the advantageous sailing times, as shown in Table 35. On the other hand, its New Brunswick operation is ideally positioned from a logistical standpoint to serve the growing Brazilian market, again because of the shorter sailing times. Finally, the company enhances its marketing strategy from investments in Israel Chemicals and Arab Potash in Jordan, which provide similar logistical advantages for India.

. . . and also has investments in other potash producers

Table 35: Comparative ocean freight indicators, sailing days

	China	India	Brazil
Vancouver	17	30	28
St. John	35	26	16
Israel	24	10	23
Jordan	24	10	23
Germany	37	22	19
Russia	38	23	21

Source: PotashCorp

Phosphate operations

PotashCorp's major phosphate facilities are in Aurora, North Carolina and White Springs, Florida, which produce all three major phosphate products. The company has one of the largest phosphate rock positions in North America. When operating at capacity, these operations have some of the lowest rock costs in the world. Over time, the company, through multi-year mining permits, will be able to mine closer to its facilities, thus creating a longer term advantage. Unlike its competitors, and given its high-quality rock position, the company focuses its sales on the higher-margin feed and industrial markets, with about 40% of its production going to these markets. PotashCorp's feed capacity is shown in Table 38, while its industrial sales are shown in Chart 66. A breakdown of profit by segment is shown in Chart 67.

PotashCorp's major phosphate facilities are in Aurora, North Carolina and White Springs, Florida, which produce all three major phosphate products

Table 36: PotashCorp—Phosphate rock and acid capacity (million tonnes), 2005

	Phosphate Rock	Phosphoric Acid
Aurora NC	6.0	1.202
White Springs FL	3.6	0.966
Geismar LA	0	0.202
Total	9.6	2.37

Source: Company reports

Table 37: PotashCorp—Phosphate capacity (million tonnes), 2005

	Aurora	White Springs	Geismar
MGA	1.835	1.908	0.337
SPA	0.676	1.138	0.196
Solids (total)	1.247	0.71	

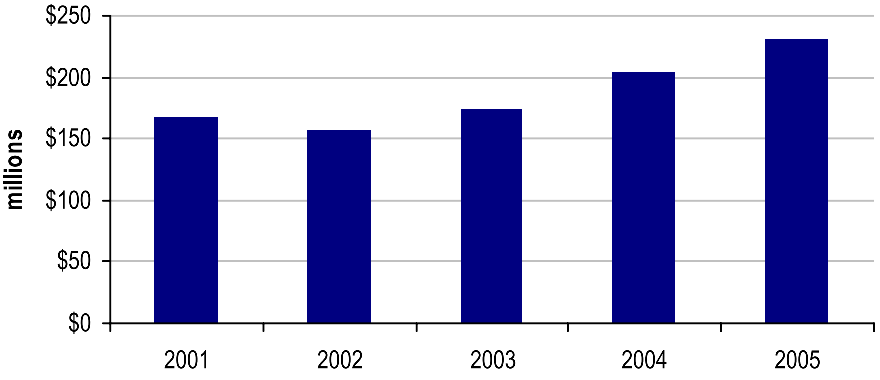
Source: Company reports

Table 38: PotashCorp—Phosphate feed capacity (million tonnes), 2005

Marseilles IL	**0.278**
White Springs FL (monocal)	0.272
Weeping Water NE	0.209
Joplin MO	0.163
Aurora NC (DFP)	0.159
Kinston NC	0
White Springs FL (DFP)	0.1
Fosfatos do Brasil	0.11
Total	1.291

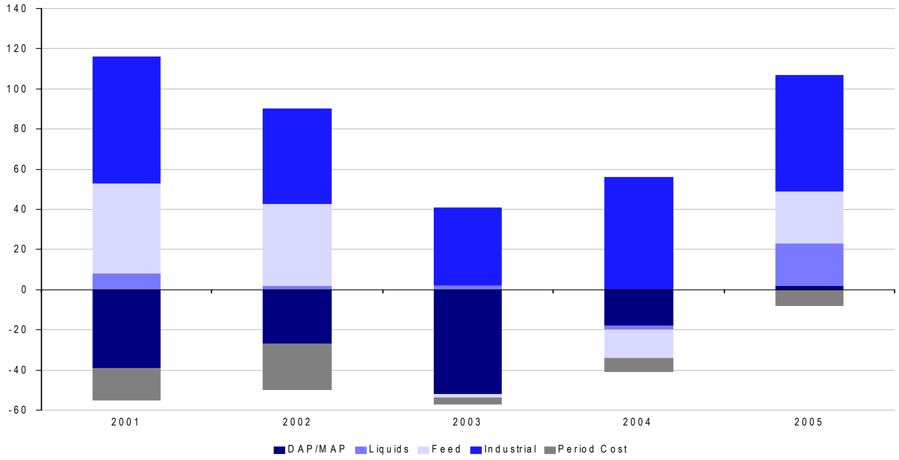
Source: Company reports

Chart 66: PotashCorp—Industrial sales



Source: Company reports

Chart 67: PotashCorp—Phosphate gross margin



Source: Company reports

Nitrogen operations

PotashCorp's crown jewel nitrogen asset is its Trinidad operation

PotashCorp is also one of the largest producers of nitrogen fertilizer products in North America. Its crown jewel asset is its Trinidad operation, which offers long-term, low-cost gas contracts and provides about 65% of the company's production. The company has also recently completed a debottlenecking, which added an additional 300,000 tonnes of capacity at Trinidad. Its US facilities are subject to higher USGC natural gas costs, but the majority of this operating production is sold to the industrial market, providing more stable sales. The company also has ownership or major supply contracts at seven out of ten US deep water ports, which provides flexibility for importing nitrogen. While the Trinidad operations provide most of the profits in this segment, the company also has a hedging program for its US production that has been very successful.

Table 39: PotashCorp—Nitrogen capacity (million tonnes), 2005

	Ammonia	Urea Solids	Nitrogen Solutions	Nitric Acid	Ammonium Nitrate Solids
Trinidad	2.007	0.709	-	0	0
Augusta GA	0.688	0.381	0.581	0.541	0.512
Lima OH	0.55	0.329	0.227	0.1	0
Geismar LA	0.483	0	1.028	0.844	0
Memphis TN	0.371	0.409	0	0	
Total	4.099	1.828	1.836	1.485	0.512

Source: Company reports

Table 40: PotashCorp—Input cost sensitivities

		Effect on EPS
$1/MMBtu NYMEX gas price increase	Nitrogen	+0.13
	Potash	-0.04
$5/long ton change in sulfur	Phosphate	+/-0.06
Canadian to US dollar change of $0.01	Canadian operating expenses	+/-0.02
	Translation gain/loss	+/-0.03

Source: Company reports

Table 41: PotashCorp—Price and volume sensitivities

Price and volume sensitivities		Effect on EPS
Price	$5/tonne change in potash	+/-0.19
	$5/tonne change in DAP/MAP	+/-0.05
	$10/tonne increase in ammonia	
	Nitrogen	+0.06
	Phosphate	-0.02
	$10/tonne changes in urea	+/-0.07
Volume	100,000 tonne change in potash	+/-0.06
	50,000 P2O5 tonne change in	+/-0.06
	50,000 N tonne change in nitrogen	+/-0.06

Source: Company report

Key issues

- **Spare capacity—**PotashCorp currently has a potash capacity of 12.9 million tonnes and has historically shut down capacity in order to balance the market. Currently about 10 million tonnes of capacity is operational, and by investing $302 million the company will increase that figure to 11.9 million tonnes. To the extent the company can realize value from its underutilized capacity, shareholder value could be created.

- **Use of cash—**Given its low-cost potash production and partially hedged nitrogen production through Trinidad, the company continues to generate significant free cash flow. We believe the use of this free cash flow is one of the key controllable issues facing the company.

Spare capacity

Utilizing spare capacity is a key opportunity for PotashCorp

PotashCorp currently has a potash capacity of 12.9 million tonnes. It has historically shut down capacity in order to balance the market. Currently about 10 million tonnes of capacity is operational, and by investing $302 million the company will increase that figure to 11.9 million tonnes. The new operational capacity will come from the low-cost Lanagin and Allan mines and should be available by the end of 2007. The remaining capacity at Patience Lake and Cory would require additional capital to become operational.

In our view, maximizing the capacity utilization in potash without disrupting the market remains PotashCorp's biggest challenge, as well as its biggest opportunity. If the company can maintain price as it raises production, it will benefit from lower costs, as shutdown costs are reduced and fixed costs are spread over more tonnes and higher volumes. In effect, this unused capacity, combined with price leadership, offers quadruple leverage— higher prices, higher volumes, lower unit costs and lower shutdown costs. Furthermore, the incremental royalties on these new tonnes are favourable, providing further leverage. We note PotashCorp will have to manage this capacity carefully as there could be new entrants in the market over the next few years (like Rio Tinto, CVRD), and/or potential expansions, such as Uralkali. However, we note that if there is strong demand there could be room for all this new production over the next five years.

Use of cash

Excess cash used for investments and potash opportunities

Given its low-cost potash production and low-cost nitrogen production at Trinidad, we expect the company to generate significant stable free cash flow. We believe the use of this free cash flow is one of the key controllable issues facing the company. Over time, the company initially used its free cash flow to consolidate the North American potash industry and enter the phosphate and nitrogen businesses. More recently, it has used its cash flow to buy equity investments in other potash producers, which we believe is a good use of funds. To date, the company has bought 25% of Sociedad Quimica y Minera de Chile (SQM), 28% of Arab Potash (with an option to go to 52% by 2010, which we believe is likely), and 10% of Israel Chemicals. We believe the company's first priority for cash is to make further investment in the potash industry, but given the consolidated nature of the business, this remains challenging. The company has also bought a 20% stake in Sinofert, the Chinese fertilizer/distributor, to gain access to the growing Chinese market and to market some of the Chinese production. For phosphate, the company has been investing in feed capacity to take advantage of its higher margins, while nitrogen funds have been concentrated on Trinidad. We believe the company will pursue other potash opportunities, and/or buy back shares, and/or increase the dividend with its cash flow in the future.

Valuation

PotashCorp trades at a premium multiple, but we believe this is deserved

As outlined in Table 42, PotashCorp trades at a higher multiple than most of its peers. However, this has always been the case and we believe this is justified given the company's larger liquidity, US listing, and its greater dominance in potash, which we believe has superior margins and a history of generally good acquisitions. We also note that price to cash flow and price to earnings multiples are overstated, as the company has about $20/share in investments that generate minimal earnings and cash flow at the present time. If we were to back out these investments, P/CFPS and EV/EBITDA would each be reduced by approximately two to three multiple points.

Applying a P/CF multiple of 10x (which we believe is justified in the context of an S&P multiple for a company with long-term, low-cost reserves and industry leadership) to our 2007 CFPS estimate of $9.50, excluding investments, and adding the market value of investments of about $20/share, we derive our target of $115. We rate the stock Buy 2. Our predictability rating of 2 reflects our view that the fertilizer industry is inherently volatile and therefore earnings/profitability are difficult to predict.

Table 42: Global fertilizer comparables

	EBITDA margin	ROE	Dividend yield	Net debt to cap	P/E	P/CFPS	EV/EBITDA	Target P/CFPS	Target EV/EBITDA
	F2007E (%)	F2007E (%)	F2007E (x)	F2006 (%)	F2007E (x)	F2007E (x)	F2007E (x)	F2007E (x)	F2007E (x)
Agrium Inc.	15.0	19.0	0.4	29.4	12.1	7.8	5.9	8.7	6.5
CF Industries	6.8	5.3	0.0	-18.4	22.8	7.5	6.0	7.9	6.4
Israel Chemicals	25.3	27.7	5.7	6.6	10.9	8.1	6.3	9.6	7.4
Mosaic	20.2	9.3	0.0	38.2	20.8	10.8	9.2	8.5	7.7
Potash Corporation	32.1	22.8	0.6	29.2	15.2	10.9	7.7	12.5	9.0
Yara	11.2	12.1	2.8	8.9	13.0	7.5	7.5	8.5	8.4
Group average	**18.4**	**16.0**	**1.6**	**15.6**	**15.8**	**8.8**	**7.1**	**9.3**	**7.6**

Source: UBS estimates

Potash Corporation

Income statement (US$m)	12/01	12/02	12/03	12/04	12/05	12/06E	% ch	12/07E	% ch	12/08E	% ch
Revenue	-	**1,914**	**2,466**	**2,902**	**3,476**	**3,303**	***-5.0***	**3,798**	***15.0***	-	
Operating expenses (ex depn)	-	(1,552)	(2,011)	(2,204)	(2,390)	(2,294)	*-4.0*	(2,580)	*12.5*	-	
EBITDA (UBS)	-	**362**	**455**	**698**	**1,086**	**1,009**	***-7.0***	**1,218**	***20.7***	-	
Depreciation	-	(220)	(227)	(240)	(242)	(243)	*0.2*	(267)	*10.1*	-	
Operating income (EBIT, UBS)	-	**142**	**227**	**458**	**843**	**766**	***-9.1***	**950**	***24.0***	-	
Other income and associates	-	25	(76)	56	49	76	*54.4*	90	*18.3*	-	
Net interest	-	(83)	(91)	(84)	(82)	(76)	*-8.2*	(76)	*0.0*	-	
Abnormal items (pre-tax)	-	0	(207)	0	0	0		0		-	
Profit before tax	-	**84**	**(147)**	**430**	**810**	**767**	***-5.4***	**965**	***25.8***	-	
Tax	-	(30)	21	(132)	(267)	(136)	*-49.1*	(278)	*104.3*	-	
Profit after tax	-	**54**	**(126)**	**299**	**543**	**631**	***16.2***	**687**	***8.9***	-	
Abnormal items (after tax)	-	0	0	0	0	0		0		-	
Minorities / pref dividends	0	0	0	0	0	0		0		0	
Net income (local GAAP)	-	**54**	**(126)**	**299**	**543**	**631**	***16.2***	**687**	***8.9***	-	
Net income (UBS)	-	**54**	**81**	**308**	**543**	**551**	***1.4***	**687**	***24.7***	-	
Tax rate (%)	-	*36*	-	*31*	*33*	*18*	*-46.2*	*29*	*62.4*	-	
Pre-abnormal tax rate (%)	-	*36*	-	*31*	*33*	*18*	*-46.2*	*29*	*62.4*	-	

Per share (US$)	12/01	12/02	12/03	12/04	12/05	12/06E	% ch	12/07E	% ch	12/08E	% ch
EPS (local GAAP)	-	0.49	(1.13)	2.70	4.89	5.96	*21.9*	6.49	*8.9*	-	
EPS (UBS)	-	0.49	0.72	2.78	4.89	5.20	*6.5*	6.49	*24.7*	-	
Net DPS	-	0.50	0.50	0.52	0.60	0.60	*0.0*	0.60	*0.0*	-	
Cash EPS	-	2.63	2.95	5.07	7.23	7.65	*5.7*	9.19	*20.2*	-	
BVPS	-	20.09	18.89	22.20	19.85	26.02	*31.1*	32.04	*23.1*	-	

Balance sheet (US$m)	12/01	12/02	12/03	12/04	12/05	12/06E	% ch	12/07E	% ch	12/08E	% ch
Cash and equivalents	-	24	5	459	94	271	*189.2*	895	*229.9*	-	
Other current assets	-	808	729	785	1,017	1,017	*0.0*	1,017	*0.0*	-	
Total current assets	-	**832**	**734**	**1,244**	**1,111**	**1,288**	***16.0***	**1,912**	***48.4***	-	
Net tangible fixed assets	-	3,270	3,108	3,099	3,263	3,680	*12.8*	3,763	*2.2*	-	
Net intangible fixed assets	-	97	97	97	97	87	*-10.6*	76	*-11.9*	-	
Investments / other assets	0	487	628	687	887	887	*0.0*	887	*0.0*	0	
Total assets	-	**4,686**	**4,567**	**5,127**	**5,358**	**5,943**	***10.9***	**6,638**	***11.7***	-	
Trade payables and other ST liabilities	0	347	380	600	843	843	*0.0*	843	*0.0*	0	
Short term debt	-	476	178	104	253	253	*0.0*	253	*0.0*	-	
Total current liabilities	-	**823**	**558**	**704**	**1,096**	**1,096**	***0.0***	**1,096**	***0.0***	-	
Long term debt	-	1,020	1,269	1,259	1,258	1,258	*0.0*	1,258	*0.0*	-	
Other long term liabilities	-	750	767	779	872	888	*1.9*	959	*8.0*	-	
Total liabilities	-	**2,593**	**2,594**	**2,741**	**3,225**	**3,242**	***0.5***	**3,313**	***2.2***	-	
Equity & minority interests	-	2,093	1,974	2,386	2,133	2,701	*26.7*	3,325	*23.1*	-	
Total liabilities & equity	-	**4,686**	**4,567**	**5,127**	**5,358**	**5,943**	***10.9***	**6,638**	***11.7***	-	

Cash flow (US$m)	12/01	12/02	12/03	12/04	12/05	12/06E	% ch	12/07E	% ch	12/08E	% ch
Net income	-	54	(126)	299	543	631	*16.2*	687	*8.9*	-	
Depreciation	-	220	227	240	242	243	*0.2*	267	*10.1*	-	
Net change in working capital	-	23	17	120	5	0		0		-	
Other (operating)	-	20	263	(9)	75	16	*-78.4*	71	*339.9*	-	
Net cash from operations	-	**316**	**382**	**650**	**865**	**890**	***2.9***	**1,025**	***15.2***	-	
Capital expenditure	-	(272)	(183)	(223)	(372)	(524)	*41.0*	(339)	*-35.3*	-	
Net acquisitions / disposals	-	0	(175)	6	(184)	(126)	*-31.4*	0		-	
Other changes in investments	-	0	0	0	0	0	*0.0*	0	*0.0*	-	
Cash from investing activities	-	**(271)**	**(358)**	**(217)**	**(555)**	**(650)**	***17.0***	**(339)**	***-47.9***	-	
Increase/(decrease) in debt	-	(18)	(50)	(84)	149	0		0		-	
Share issues / (repurchases)	-	4	59	161	(758)	0		0		-	
Dividends paid	-	(52)	(52)	(56)	(65)	(62)	*-4.8*	(62)	*0.0*	-	
Other cash from financing	-	0	0	0	0	0		0		0	
Cash from financing activities	-	**(66)**	**(44)**	**21**	**(675)**	**(62)**	***-90.8***	**(62)**	***0.0***	-	
Cash flow chge in cash & equivalents	-	**(21)**	**(20)**	**454**	**(365)**	**178**		**624**	***251.3***	-	
FX / non cash items	-	-	0	0	0	0		0		-	
Bal sheet chge in cash & equivalents	-	-	**(20)**	**454**	**(365)**	**178**		**624**	***251.3***	-	
Core EBITDA	-	362	455	698	1,086	1,009	*-7.0*	1,218	*20.7*	-	
Maintenance capital expenditure	-	(212)	(151)	(221)	(383)	(535)	*39.8*	(350)	*-34.6*	-	
Maintenance net working capital	-	0	0	0	0	0		0		-	
Operating free cash flow, pre-tax	-	**149**	**304**	**477**	**703**	**474**	***-32.5***	**868**	***83.0***	-	

Source: Company accounts, Thomson Financial, UBS estimates. (UBS) valuations are stated before goodwill, exceptionals and other special items. Note: For some companies, the data represents an extract of the full company accounts.

Global Equity Research

Americas

Chemicals, Specialty

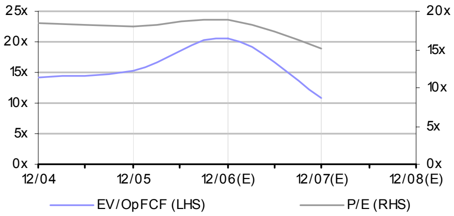
Rating	**Buy 2**
Price target	**US$115.00**

Potash Corporation

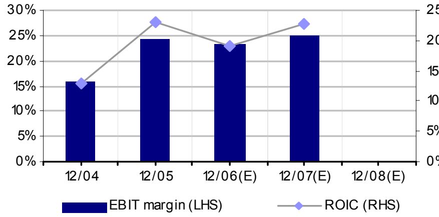
Company Profile

Potash Corporation of Saskatchewan Inc. is the world's largest and lowest-cost publicly traded potash producer. Its potash reserves are sufficient for over 100 years of production. The company controls about 40% of the world's excess capacity and has always followed a price leadership strategy whereby it has matched production to sales. Over time, the company has used its free cash flow to consolidate its position through acquisitions. Potash Corporation is also the world's third-largest phosphate producer. Current phosphate reserves should last more than 50 years.

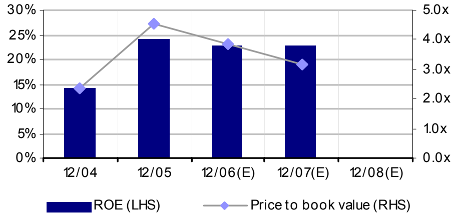
Value (EV/OpFCF & P/E)



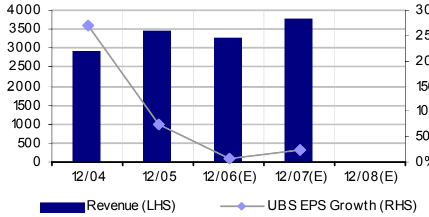
Profitability



ROE v Price to book value



Growth (UBS EPS)



Valuation (x)	**5Yr Avg**	**12/04**	**12/05**	**12/06E**	**12/07E**	**12/08E**
P/E (local GAAP)	-	19.5	18.4	16.8	15.5	-
P/E (UBS)	-	18.9	18.4	19.3	15.5	-
P/CEPS	-	10.4	12.4	13.1	10.9	-
Net dividend yield (%)	-	1.0	0.7	0.6	0.6	-
P/BV	-	2.4	4.5	3.9	3.1	-
EV/revenue (core)	-	2.3	3.1	3.0	2.5	-
EV/EBITDA (core)	-	9.6	9.9	9.7	7.7	-
EV/EBIT (core)	-	14.7	12.7	12.8	9.9	-
EV/OpFCF (core)	-	14.1	15.3	20.6	10.8	-
EV/op. invested capital	-	1.9	2.9	2.4	2.2	-

Enterprise value (US$m)	**12/04**	**12/05**	**12/06E**	**12/07E**	**12/08E**
Average market cap	5,599	9,642	10,424	10,424	10,424
+ minority interests	0	0	0	0	-
+ average net debt (cash)	1,172	1,160	1,328	928	616
+ pension obligations and other	0	0	0	0	-
- non-core asset value	(58)	(58)	(1,974)	(1,974)	-
Core enterprise value	6,713	10,744	9,778	9,378	-

Growth (%)	**5Yr Avg**	**12/04**	**12/05**	**12/06E**	**12/07E**	**12/08E**
Revenue	-	17.7	19.8	-5.0	15.0	-
EBITDA (UBS)	-	53.5	55.6	-7.0	20.7	-
EBIT (UBS)	-	101.6	84.1	-9.1	24.0	-
EPS (UBS)	-	NM	75.5	6.1	24.7	-
Cash EPS	-	71.9	42.7	5.7	20.2	-
DPS Net	-	3.9	15.5	0.0	0.0	-
BVPS	-	17.5	-10.6	31.1	23.1	-

Margins (%)	**5Yr Avg**	**12/04**	**12/05**	**12/06E**	**12/07E**	**12/08E**
EBITDA / revenue	-	24.1	31.2	30.6	32.1	-
EBIT / revenue	-	15.8	24.3	23.2	25.0	-
Net profit (UBS) / revenue	-	10.6	15.6	16.7	18.1	-
Return on capital (%)						
EBIT ROIC (UBS)	-	12.8	23.1	19.2	22.7	-
ROIC post tax	-	8.9	15.5	15.8	16.1	-
Net ROE	-	14.1	24.0	22.8	22.8	-
Coverage ratios (x)						
EBIT / net interest	-	6.1	10.8	11.2	13.8	-
Dividend cover (UBS EPS)	-	5.5	8.3	8.8	11.0	-
Div. payout ratio (%, UBS EPS)	-	18.2	12.0	11.3	9.1	-
Net debt / EBITDA	-	1.3	1.3	1.2	0.5	-
Efficiency ratios (x)						
Revenue / op. invested capital	-	0.8	1.0	0.8	0.9	-
Revenue / fixed assets	-	0.9	1.1	0.9	1.0	-
Revenue / net working capital	-	10.9	19.4	19.0	21.8	-
Investment ratios (x)						
OpFCF / EBIT	-	1.0	0.8	0.6	0.9	-
Capex / revenue (%)	-	7.7	10.7	15.9	8.9	-
Capex / depreciation	-	0.9	1.5	2.2	1.3	-
Capital structure (%)						
Net debt / total equity	-	37.9	66.5	45.9	18.5	-
Net debt / (net debt + equity)	-	27.5	39.9	31.5	15.6	-
Net debt (core) / EV	-	17.3	10.7	11.3	8.2	-

Source: Company accounts, Thomson Financial, UBS estimates. (UBS) valuations are stated before goodwill, exceptionals and other special items. Valuations: based on an average share price that year, (E): based on a share price of US$100.35 on 20 Sep 2006 19:35 EDT; Market cap (E) may include forecast share issues/buybacks.

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Appendix 1: Industry terms and definitions

Table 1: Fertilizer definitions

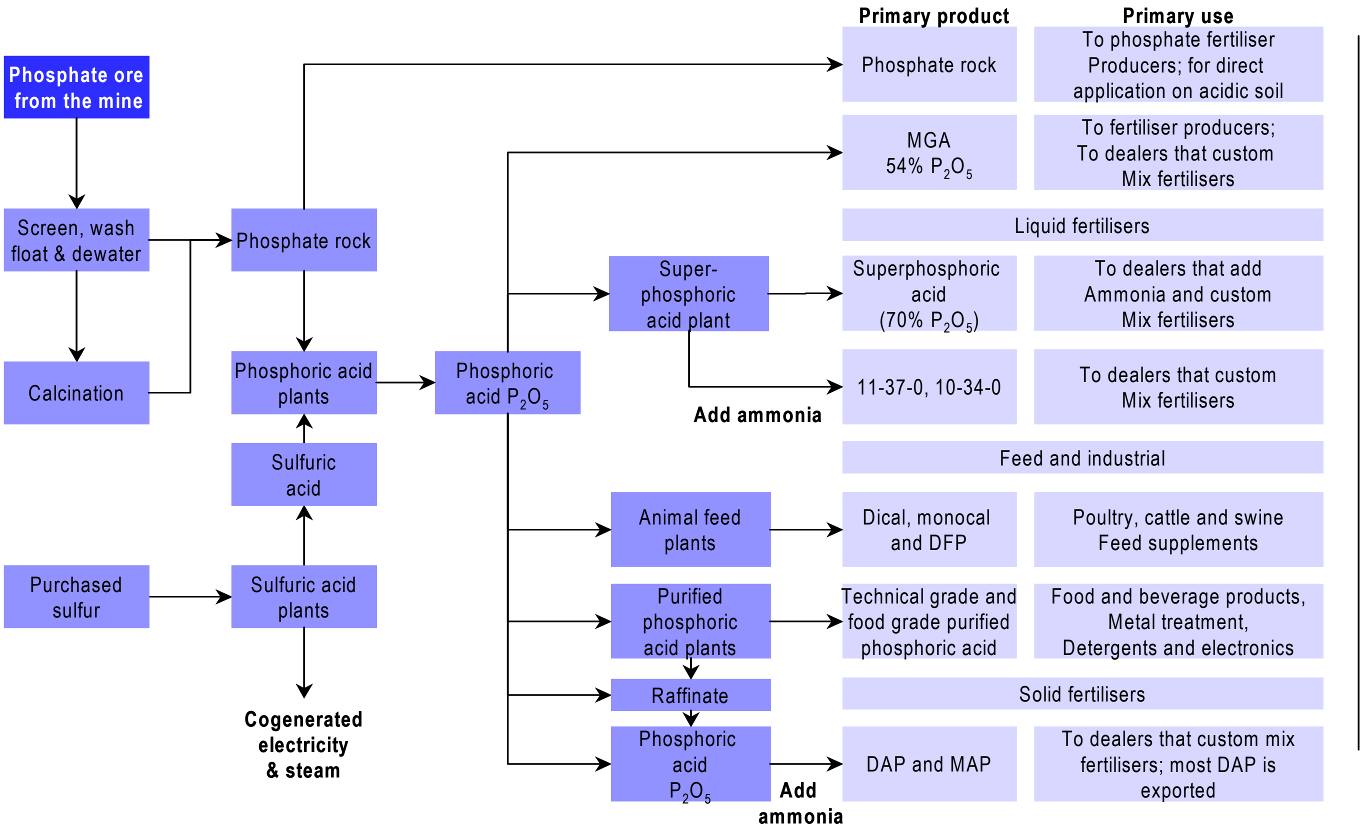
Ammonia	Produced primarily from natural gas and air as the first step in the production of nitrogen fertilizers with NPK properties of 82-0-0. It can also be applied to soil directly and its properties allow it to be transported in liquid form.
Annual application	A system in which the annual fertilizer requirements of the crop are given each year (rather than at longer intervals).
Application	General term for putting fertilizer on fields, crops, grassland, forests etc.
Application rate	Weight of fertilizer (for liquids often volume) applied per unit area
Blended fertilizer	Compound fertilizer made by dry mixing of several fertilizer materials of similar granulometry, with no chemical reaction
Bulk blend	A mixed fertilizer prepared without a chemical reaction from components that retain their physical form. Usually prepared shortly before use and supplied to farm in bulk.
Bulk fertilizer	Fertilizer in a stockpile or transported loose, without any form of packaging or closed container
Bushel	One bushel of corn is approximately 56 pounds
Compound fertilizer	Material containing two or three of the primary nutrients N, P and K
Crushing strength	The ability of a granular or other particulate product to resist breakdown by physical pressure
Deficiency	An inadequate supply or non-availability of an essential nutrient, restricting plant growth. It is usual to distinguish true deficiency (due to an inadequate content of a nutrient in the soil) and induced deficiency (arising from a chemical interaction with other soil constituents).
Degradation	The process of breakdown of soil organic matter with evolution of energy, formation of humic and fulvic acids and conversion of plant nutrients to inorganic form
Diammonium Phosphate (DAP)	Solid phosphate fertilizer with NPK properties of 18-46-0. Along with MAP, it is one of the most widely used phosphate crop nutrients in the world.
Feed Phosphates	Essential feed ingredients used as mineral supplements in animal diets and used primarily in feeds for beef, swine, dairy and poultry industries.
Feed Potassium	Mineral supplements produced for animal feeds.
Formula	Nutrient content of a fertilizer expressed in the order N-P-K, and in terms elements or oxides of P and K according to relevant legislation
Granular fertilizer	Fertilizer composed of spheroid particles, usually 1.5-5 mm in diameter, and formed by any of a number of granulation processes
GSSP/SSP	GSSP (granulated single superphosphate) and SSP (powdered from) are produced by combining sulphuric acid with phosphate rock, producing SSP. NPK is produced by combining SSP powder and other nutrients. It can also be used to produce GSSP.
KC1 or MOP (Potassium Chloride)	Potassium chloride (KC1), or muriate of potash (MOP), containing 60% to 62.5% K_2O, primarily used as potassium fertilizer. It varies in colour from red to white and posseses unique properties that allow it to be used as an icemelter and in liquid fertilizers.
Leaching	The loss of plant nutrients from soils in percolating water
Liming	The application of liming materials (usually Ca-based, but sometimes including Mg), usually to improve soil physical properties (pH, structure) but sometimes also improving chemical fertility
Liquid feed	In horticulture, application of fertilizer in solution in water
Liquid fertilizer	Fertilizer in solution and/or suspension form
Localized application	Method of application in which fertilizer is concentrated in specified parts of the soil which may be either on or below the suRenewable Fuels Associationce; or, the location in which fertilizer is placed
Maintenance application	Fertilizer applied to maintain the chemical fertility of the soil
MicroEssentials™(ME)	A DAP or MAP product that creates platelets of sulphur that breaks down into the soil over time.
Micronutrients	B, Cl, Cu, Fe, Mn, Mo, Zn - nutrients required by plants in very small quantities
Mineral fertilizer	Fertilizer containing one or more major nutrients in inorganic form or as urea or cyanamide (or rarely in the form of synthetic organic compounds).
Mineralization	Microbial breakdown of soil organic matter and crop residues releasing plant nutrients in available form
Mixed fertilizer	Material containing two or three of the primary nutrients N, P and K
Monoammonium	Solid fertilizer with NPK properties of 13-52-0.
Neutralizing value	The quantified effect of a liming material in neutralizing the acidity of the soil, usually expressed in relation to the effect of CaCO3

Nitrification	Bacterial conversion to the nitrate form of ammonium nitrogen from fertilizer or formed during mineralization of organic matter
Nitrogen (N)	One of the essential nutrients that makes up 80% of the atmosphere. Certain plants can obtain nitrogen from the air, but most get it from the soil. It must be applied annually since the nutrient value is consumed during the growing season.
Nnitrous oxide	One of the greenhouse gases, N2O. Agriculture is the main anthropogenic source of N2O
NPK compound	Compound containing all three of the primary nutrients N, P and K
NPK ratio	The ratio of the contents of fertilizer nutrients in a fertilizer, e.g. a fertilizer with analysis 12-12-18 has a 1-1-1.5 ratio. Expressed in terms of N, P or P2O5 and K or K2O depending on local legislation
Nutriet cycle	The series of transformations which a nutrient undergoes in the biosphere (soil, plant, animals, man, the environment) before returning to its original form
Nutriet recovery	Proportion of applied nutrient taken up by the crop, usually expressed as a percentage
Nutriet uptake	Amount of a nutrient taken up by a crop during its growth period; usually refers to the maximum nutrient content
Phosphoric Acid	A brown liquid used as a feedstock in producing most granular crop nutrients.
Phosphorous Pentoxide (P_2O_5)	The chemical form of phosphate that is found in fertilizers and crop nutrients.
Phosphorus (P)	One of the essential nutrients required for plant growth. It plays a key role in storing energy and transferring many other plant processes. It is usually found in Phosphate ore.
Potash	A term typically used for materials containing potassium fertilizer with 22% to 62% K_2O.
Potassium (K)	One of the essential nutrients required for plant growth. It is required for numerous different functions in plants, which includes activation of enzyme systems, photosynthesis and protein synthesis.
Potassium Oxide (K_2O)	A term used in the fertilizer industry to measurepotassium content.
Profitability	Profitability margin over cost incurred
Salinization	SuRenewable Fuels Associationce or near-suRenewable Fuels Associationce accumulation of salts. Includes alkalization (mostly by sodium salts)
Soil fertility	The overall ability of a soil to support vigorous crop growth by ensuring adequate plant nutrients and suitable conditions for water uptake, and by providing favourable conditions for root growth and development. Fertility is a synthesis of chemical, physical and biological components and is also influenced by climatic and management factors
Soil sample	Representative amount of soil taken from an area for assessment of soil fertility characteristics, usually chemical
Solubility	The amount of nutrient in a fertilizer that is soluble in water or a specified solution. By extension, some solubilities are used as a measure of nutrient availability to plants
Spring fertilization	Fertilizer application on winter and summer crops at the beginning of growth in the months February, March, April
Storage	The holding of a supply of fertilizer, in large or small quantities, until it is needed for application. The conditions of storage must meet safety requirements and guard against product deterioration
Triple Superphosphate (TSP)	Contains no nitrogen with NPK properties of 0-46-0. It is primarily used in crops that require a high concentration of phosphate and little or no nitrogen.
Uptake	Amount of a nutrient taken up by a crop during its growth period; usually refers to the maximum nutrient content
Urea	Most commonly produced and traded nitrogen product with NPK composition of 46-0-0. It is used as fertilizer and industrial purposes.
Urea Amonium Nitrate (UAN)	Most widely used liquid fertilizer containing between 28% and 32% nitrogen. It is produced by dissolving urea ammonium nitrate and urea in water.
Urea condensate	The products of reaction between urea and aldehyde(s) that produce a slow release nitrogen fertilizer
Urea formaldehyde	Slow release nitrogenous fertilizer produced by the reaction between urea and formaldehyde.
Value/Cost ratio	The ratio of the value of additional crop to the cost of fertilizer applied
Variable rate application	Variation of nutrient application rates as the applicator moves across the field, according to changes of the nutrient levels in the soil. Also called site-specific application
Yield determinant	Any factor, natural or due to human intervention, influencing crop yield

Source: IFA, Mosaic, UBS

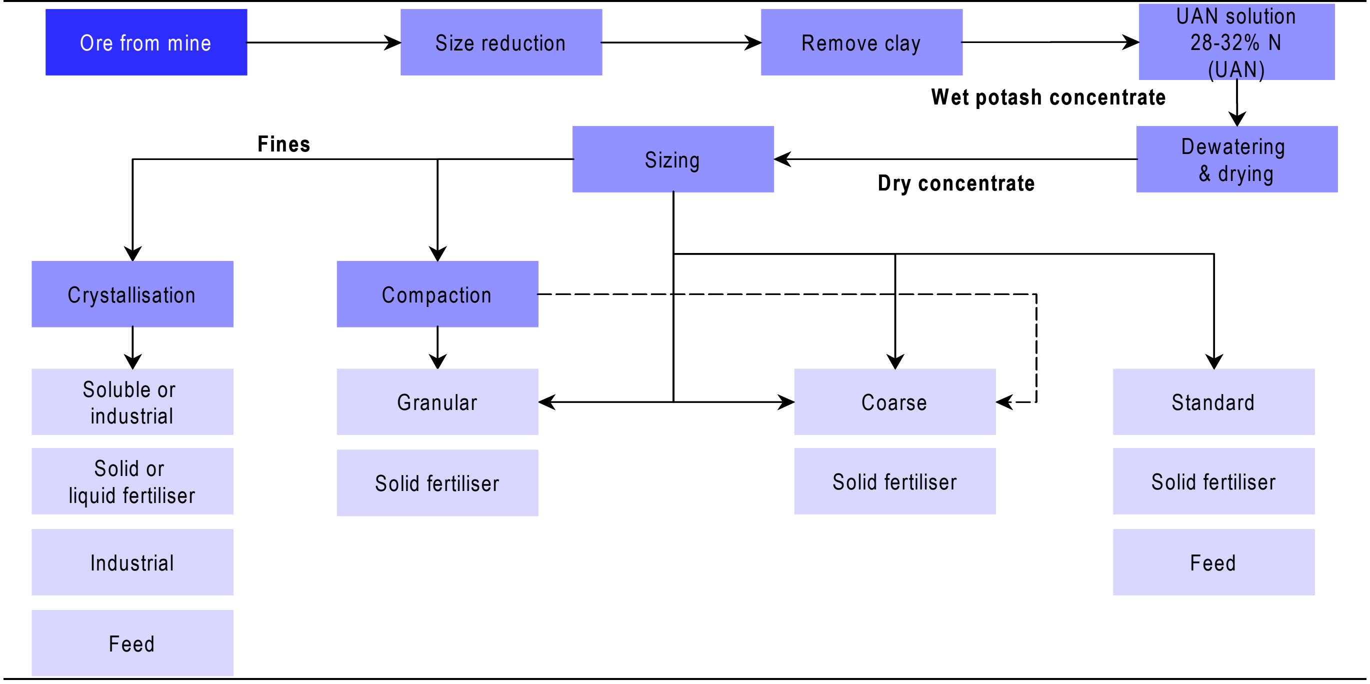
Appendix 2: Fertilizer production flow chart

Figure 1: Production process for phosphate fertilizers


Primary product
Primary use
Phosphate ore from the mine
Screen, wash float & dewater
Calcination
Purchased sulfur
Phosphate rock
Phosphoric acid plants
Sulfuric acid
Sulfuric acid plants
Cogenerated electricity & steam
Phosphoric acid P_2O_5
Super-phosphoric acid plant
Add ammonia
Animal feed plants
Purified phosphoric acid plants
Raffinate
Phosphoric acid P_2O_5
Add ammonia
Phosphate rock
To phosphate fertiliser Producers; for direct application on acidic soil
MGA 54% P_2O_5
To fertiliser producers; To dealers that custom Mix fertilisers
Liquid fertilisers
Superphosphoric acid (70% P_2O_5)
To dealers that add Ammonia and custom Mix fertilisers
11-37-0, 10-34-0
To dealers that custom Mix fertilisers
Feed and industrial
Dical, monocal and DFP
Poultry, cattle and swine Feed supplements
Technical grade and food grade purified phosphoric acid
Food and beverage products, Metal treatment, Detergents and electronics
Solid fertilisers
DAP and MAP
To dealers that custom mix fertilisers; most DAP is exported

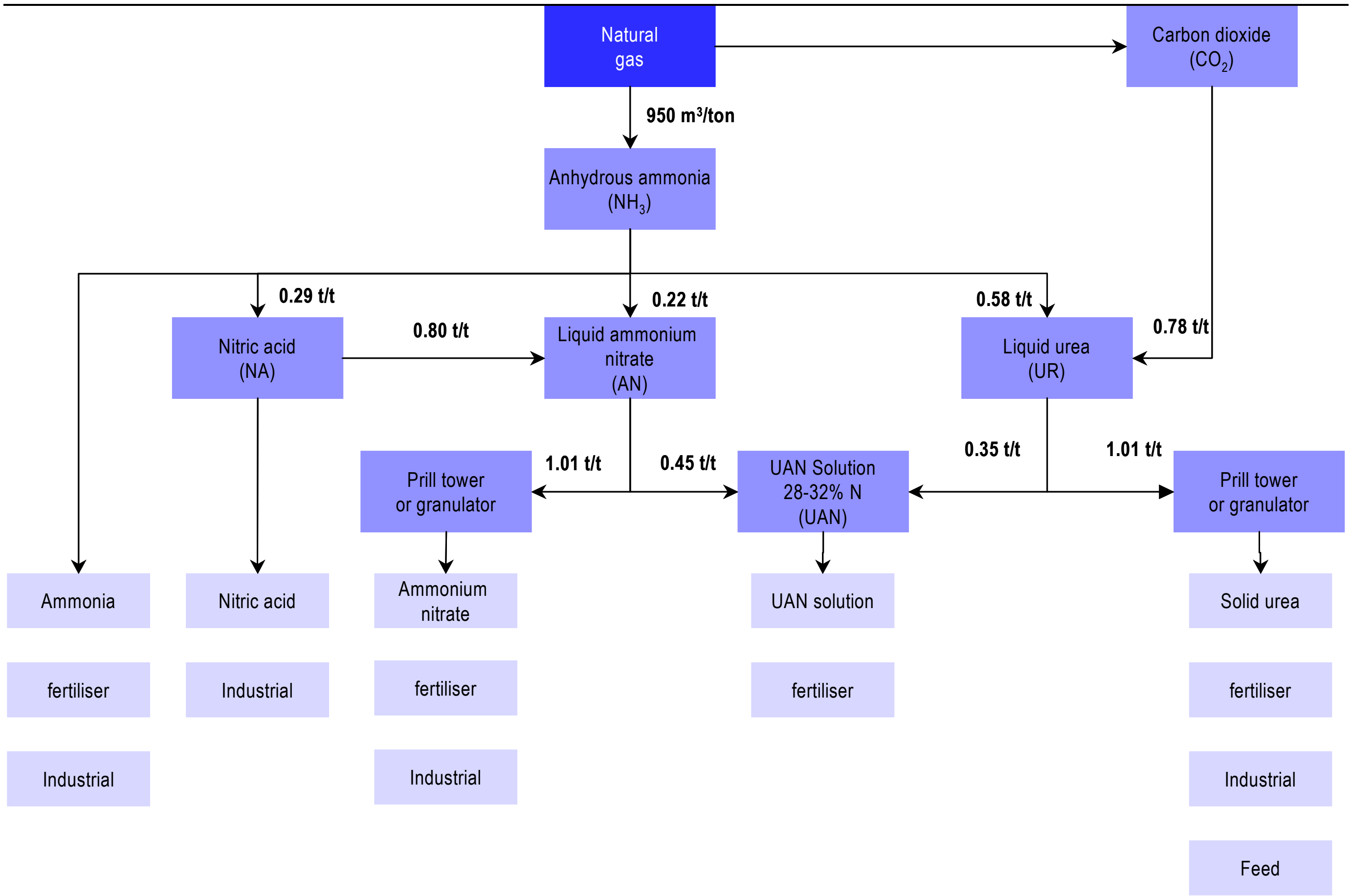
Source: UBS estimates

Figure 2: Production process for potash fertilizers



Source: UBS estimates

Figure 3: Production process for nitrogen fertilizers



Source: UBS estimates

■ Statement of Risk

The fertilizer industry is highly sensitive to shifts in supply and demand. Key risks include weak demand, as evidenced by general economic conditions and crop prices, and supply, in the form of capacity additions. The secotr is also subject to currency fluctuations, changes in government policy, operational issues, labour disruptions, weather, energy prices and natural disasters.

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UBS Investment Research: Global Equity Ratings Definitions and Allocations

UBS rating	Definition	UBS rating	Definition	Rating category	Coverage[1]	IB services[2]
Buy 1	FSR is > 6% above the MRA, higher degree of predictability	**Buy 2**	FSR is > 6% above the MRA, lower degree of predictability	**Buy**	48%	34%
Neutral 1	FSR is between -6% and 6% of the MRA, higher degree of predictability	**Neutral 2**	FSR is between -6% and 6% of the MRA, lower degree of predictability	**Hold/Neutral**	45%	35%
Reduce 1	FSR is > 6% below the MRA, higher degree of predictability	**Reduce 2**	FSR is > 6% below the MRA, lower degree of predictability	**Sell**	7%	32%

1: Percentage of companies under coverage globally within this rating category.

2: Percentage of companies within this rating category for which investment banking (IB) services were provided within the past 12 months.

Source: UBS; as of 30 June 2006.

KEY DEFINITIONS

Forecast Stock Return (FSR) is defined as expected percentage price appreciation plus gross dividend yield over the next 12 months.

Market Return Assumption (MRA) is defined as the one-year local market interest rate plus 5% (a proxy for, and not a forecast of, the equity risk premium).

Predictability Level The predictability level indicates an analyst's conviction in the FSR. A predictability level of '1' means that the analyst's estimate of FSR is in the middle of a narrower, or smaller, range of possibilities. A predictability level of '2' means that the analyst's estimate of FSR is in the middle of a broader, or larger, range of possibilities.

Under Review (UR) Stocks may be flagged as UR by the analyst, indicating that the stock's price target and/or rating are subject to possible change in the near term, usually in response to an event that may affect the investment case or valuation.

EXCEPTIONS AND SPECIAL CASES

US Closed-End Fund ratings and definitions are: Buy: Higher stability of principal and higher stability of dividends; Neutral: Potential loss of principal, stability of dividend; Reduce: High potential for loss of principal and dividend risk.

UK and European Investment Fund ratings and definitions are: Buy: Positive on factors such as structure, management, performance record, discount; Neutral: Neutral on factors such as structure, management, performance record, discount; Reduce: Negative on factors such as structure, management, performance record, discount.

Core Banding Exceptions (CBE): Exceptions to the standard +/-6% bands may be granted by the Investment Review Committee (IRC). Factors considered by the IRC include the stock's volatility and the credit spread of the respective company's debt. As a result, stocks deemed to be very high or low risk may be subject to higher or lower bands as they relate to the rating. When such exceptions apply, they will be identified in the Companies Mentioned or Company Disclosure table in the relevant research piece.

Companies mentioned

Company Name	Reuters	Rating	Price	Price date/time

Company Name	Reuters	Rating	Price	Price date/time
Agrium Inc.[16]	AGU.N	Buy 2	US$26.01	20 Sep 2006 19:35 EDT
CF Industries[13,16]	CF.N	Neutral 2	US$16.95	20 Sep 2006 19:35 EDT
Israel Chemicals[2b,20]	CHIM.TA	Buy 1 (CBE)	NIS20.40	20 Sep 2006 23:37 BST
Potash Corporation[2a,4,16]	POT.N	Buy 2	US$100.35	20 Sep 2006 19:35 EDT
The Mosaic Company[16]	MOS.N	Reduce 2	US$16.66	20 Sep 2006 19:35 EDT
Yara[2b,23]	YAR.OL	Buy 2	NKr92.00	20 Sep 2006 23:37 BST

Source: UBS. BST: British summer time; EDT: Eastern daylight time.

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The analyst responsible for this report has reviewed the material operations of the issuer and/or met with senior management.

Unless otherwise indicated, please refer to the Valuation and Risk sections within the body of this report.

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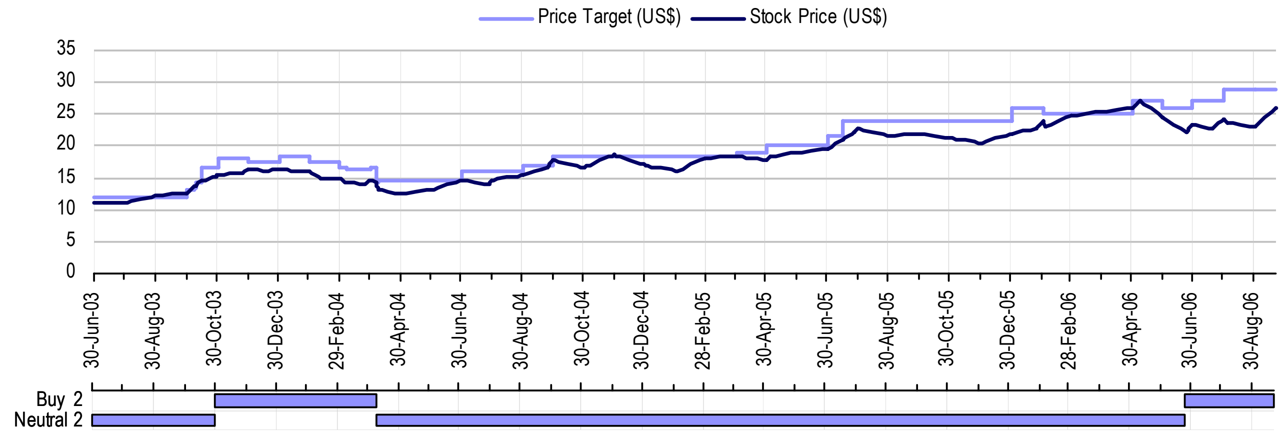
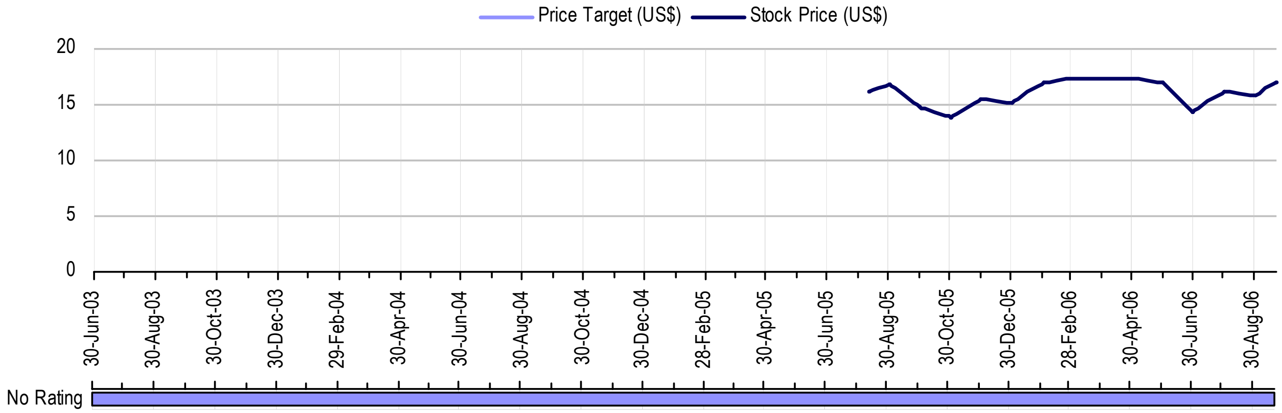
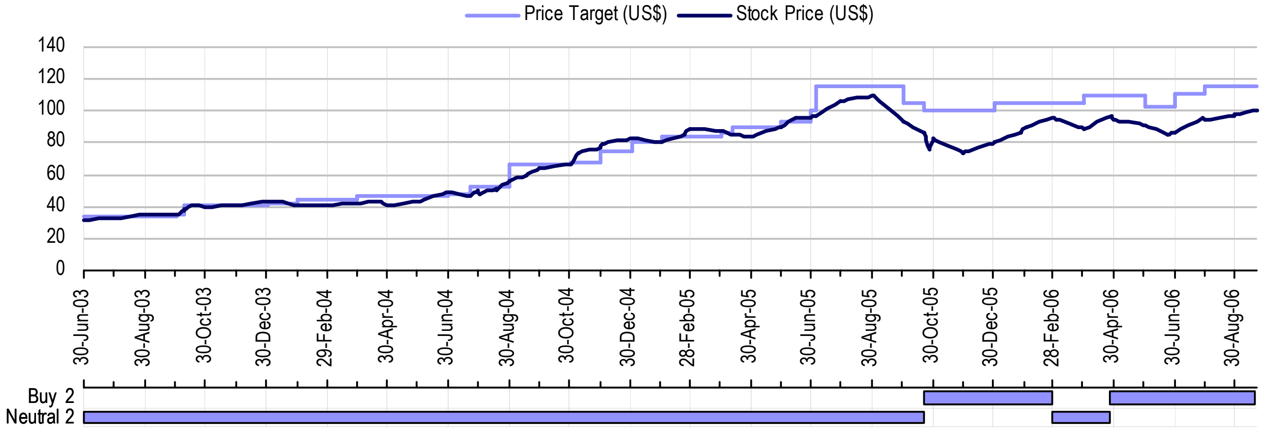


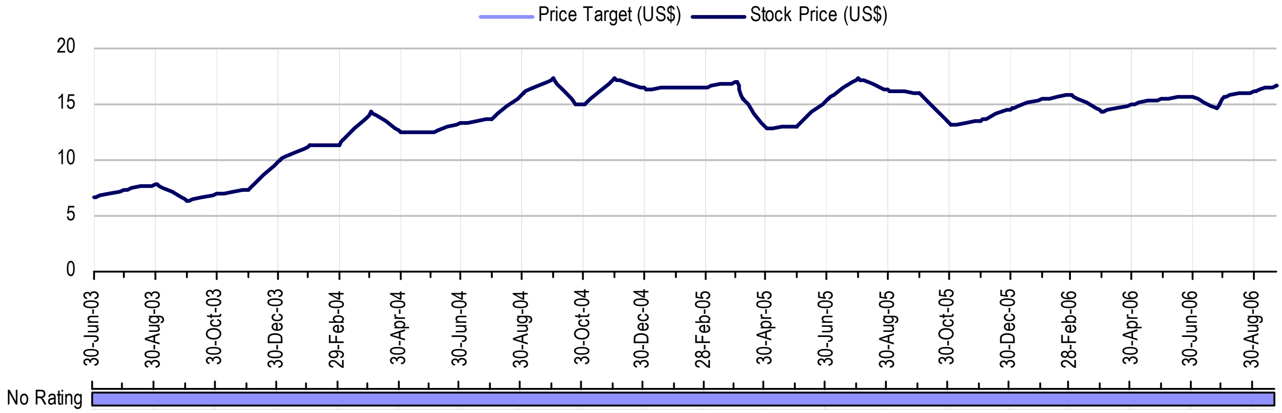
CF Industries Holdings, Inc. (US$)



Potash Corporation of Saskatchewan Inc. (US$)



The Mosaic Company (US$)



Source: UBS; as of 20 September 2006.

Note: On September 9, 2006, UBS adopted new percentage band criteria for its rating system. (See 'UBS Investment Research: Global Equity Ratings Definitions and Allocations' table for details). Between October 13, 2003 and September 9, 2006 the percentage band criteria used in the rating system was 10%. Prior to October 13, 2003, the UBS ratings and their definitions were: Buy 1: Excess return potential >15%, smaller range around price target; Buy 2: Excess return potential >15%, larger range around price target; Neutral 1: Excess return potential between -15% and 15%, smaller range around price target; Neutral

2: Excess return potential between -15% and 15%, larger range around price target; Reduce 1: Excess return potential < -15%, smaller range around price target; Reduce 2: Excess return potential < -15%, larger range around price target. Excess return is defined as the difference between the FSR and the one-year local market interest rate.

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